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THE SURGICAL TREATMENT OF BRONCHIECTASIS—ROLE OF PENICILLIN IN POSTOPERATIVE CARE*

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Bronchiectasis is a serious disease of the lungs in which there has been a renewed interest, coincidental with the development of successful thoracic surgery during the last fifteen years. As with many other diseases for which there was no successful treatment, the interest in the condition formerly was manifested chiefly by pathologists whose demonstration of the striking postmortem changes made fascinating teaching material. There was little interest manifested by internists except in the rather easy recognition of the symptom complex of the advanced cases, and surgeons had no interest except in the treatment of the suppurative complications of the disease. The increasing success of the surgical treatment by ablation of the diseased segments of lung has led to a more accurate appraisal of the disease as to its etiology, its frequently bizarre symptom complex, its frequency, its pathology, and its very serious morbidity and mortality. We now know that it frequently masquerades under a multitude of mistaken diagnoses, most of which minimize the true seriousness of the condition. Many patients harboring the progressive and potentially deadly changes of bronchiectasis are lulled by such diagnoses as a simple bronchitis, sinusitis, "cigarette cough", repeated influenzal attacks and asthma.

It is the purpose of this paper to present briefly certain aspects of the disease and to elaborate on the surgical treatment, particularly the part that penicillin has played in the management of surgical cases. An analysis of the 55 pulmonary resections performed for bronchiectasis at the University of Virginia Hospital from September, 1942, to April, 1946, will be presented.

PATHOLOGY. An understanding of the pathology of bronchiectasis is a prerequisite to rationalization of the radical surgical treatment necessary for its cure. The underlying pathology consists of a dilatation and chronic infection of the bronchi, usually in the lower lobes, although in right lower lobe cases, the middle lobe is involved also in more than one-half of the cases, and in left lower lobe cases, the lingular segment of the left upper lobe is involved in a similar percentage. In our own series, 63 per cent of the right, and 62 per cent of the left lower lobe cases had involvement of the above mentioned adjacent lobes. Typically, there is a destruction of the mucosa, the submucosa, elastic and smooth muscle elements of the bronchial wall, with varying degrees of fibrous tissue healing.[6] A parenchymal infection usually exists, manifested by peribronchial pneumonitis only in the less active phase, and by extensive pneumonic consolidation in the acute exacerbations. It must be emphasized that the bronchial wall changes are of an *irreversible* nature—the elastic, the muscle, and the epithelial elements never regenerate to give normal physiological function.[6] The degree of infection present at any given time influences tremendously the clinical and the pathological pictures, but even with the characteristic remissions, the bronchial tree does not return to normal. With long standing disease, pulmonary fibrosis, emphysema, and pleural adhesions may be present, and may diminish pulmonary function to a crippling degree. Small contracted lobes, typical

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of advanced bronchiectasis, are due to extensive fibrosis of the parenchyma, and many such specimens removed consist primarily of large bronchiectatic cavities and surrounding scar tissue. As with any chronic suppurative process of long duration, amyloid disease may develop, although we have seen no proven cases during the time of the present study.

There is a type of "dry" bronchiectasis, bronchiectasis sicca, which does not harbor acute or subacute infection, but which pathologically consists of dilated bronchi with complete fibrotic healing. These cases do not present the usual clinical syndrome but will frequently present themselves with alarming pulmonary hemorrhages.

ETIOLOGY. It is not in the scope of this paper to discuss the many theories of the etiology of bronchiectasis. The most logical explanation from both a clinical and an experimental standpoint involves the fundamental pathological principle of infection in the obstructed portion of a partially or completely occluded hollow viscus. The nature of the original bronchial obstruction is not obvious in many cases, but there are many reasons to believe that the most common cause of bronchial obstruction is retained tenacious bronchial secretions.[2] The majority of the cases of bronchiectasis originate in childhood when pneumonia *per se* and the respiratory complications of whooping cough and measles are prevalent. These pulmonary infections produce mucoid or purulent secretions which are evacuated with difficulty through the small caliber system of bronchi, particularly when most children cannot be successfully urged to cough vigorously and prophylactically until the stimulus is great. The infection already present plus the bronchial obstruction may lead to rapid, irreversible changes characterizing bronchiectasis. Other causes of bronchial obstruction may be foreign bodies, intrabronchial tumors, large mediastinal lymph nodes, and bronchial strictures.

Another significant cause of bronchiectasis does not involve the bronchial obstruction mechanism. Chronic parenchymal suppuration, such as a lung abscess or tuberculosis, may initiate the changes of bronchiectasis in the bronchi draining the area of disease by the long exposure to contaminated secretions. The residual cough and expectoration following the healing of a pulmonary cavity, either tuberculous or non-tuberculous, is usually due to residual bronchiectasis.

ASSOCIATION WITH SINUS DISEASE. This topic is purposefully discussed as a separate entity. The etiological relationship of sinusitis and bronchiectasis is not clear. For years, the explanation of the coexistence of the two diseases lay in the fact that the post-nasal discharge from the sinuses entered the bronchial tree and, over a long period of time, initiated the changes of bronchiectasis.

Recently it has been proven by x-rays of the sinuses, following iodized oil bronchograms, that bronchial secretions evacuated by coughing readily enter the sinuses. Suffice it to say that the two diseases coexist usually in about 60 per cent of the cases of bronchiectasis,[9] although in our series the association was only in 38 per cent.

SYMPTOMS. The symptoms of bronchiectasis do not always fulfill the classical features depicted in the texts. We no longer wait for the extreme cough, abundance of foul sputum, and emaciation to suspect this disease. Cough may be mild and sputum scanty and mucoid in the presence of serious bronchiectasis. The degree of cough and expectoration depends upon the phase of activity of the infection. Pulmonary hemorrhage is a very common symptom[5]—in fact, bronchiectasis is the second most common cause of pulmonary bleeding (Table I). Forty-

TABLE I

SYMPTOMS

	Number Cases	*Percentage*
Pulmonary Hemorrhage	26	47.3
Pneumonia	33	60.0
Associated Sinusitis		
Severe—Requiring Operation	18	32.7
Mild—No operation	3	5.5
		38.2
Duration Symptoms	9 Cases—"All Life"	
	6 Cases—Under One Year	
	Average Duration 9.5 Years	

seven per cent of our patients had gross hemorrhages at some time during their illness. Episodes of pneumonia are common. These are really acute exacerbations of the pneumonitis associated with the disease. Chronicity of symptoms is marked in practically all cases. Our average patient had endured symptoms for 9.5 years before operation. There are occasional patients with minimal pulmonary symptoms and marked systemic symptoms such as malnutrition, arthritis, metastatic abscesses, unexplained fever and malaise. Three patients in our series had such symptoms and the true diagnosis

was discovered by iodized oil bronchograms for which there seemed to be little initial indication.

Although the disease is common in all age groups, most of the surgical cases fall into the younger decades between ten and thirty years (Table II).

TABLE II
INCIDENCE
(55 Cases)

Age

Years	*Cases*	Youngest—2 Years
0-10	5	Oldest—57 Years
10-20	19	
20-30	14	
30-40	11	
40-50	4	
50-60	2	

Race		*Sex*	
White	52 (94.5%)	Male	19 (34.5%)
Colored	3 (5.5%)	Female	36 (65.5%)

The sex disproportion of 36 females to 19 males is probably related to the greater sensitivity of the female to the social maladjustment caused by chronic cough and malodorous expectoration. The fact that only three cases in the series were in the colored race may have a similar explanation. Limited hospital facilities for the colored race played no part in this disproportion because no colored patients suitable for resection were turned away.

DIAGNOSIS. The diagnosis of bronchiectasis may always be suspected in any patient with chronic pulmonary symptoms, particularly when tuberculosis has been eliminated as a possibility. Plain chest films constitute the first step in accurate diagnosis but it must be recognized that the changes depicted by such films are extremely variable and, indeed, the films of patients having bronchiectasis may be reported by competent radiologists as being entirely normal. The most common plain film changes of bronchiectasis are due to the degree of peribronchial pneumonitis, or frank consolidation, present at the time of the x-ray. This pneumonitis is present usually in the lower lobes and in a minor degree is called "increased bronchovascular markings". Less commonly there are cystic areas, the so-called "ring shadows", which represent large cystic dilatations of the bronchi. The differential diagnosis of congenital cystic disease naturally enters the picture with such a finding. There may be small contracted lobes as delineated by thickened interlobar fissure lines, and many cases show pleural thickening as represented by obliteration of the costophrenic or cardiophrenic sulci or a ragged contour of the diaphragm.

Bronchoscopy is an aid in diagnosis but its limitations are marked. The state of the mucosa of the larger bronchi, the amount, character and origin of the secretions, and the presence of bronchial obstruction such as neoplasms, foreign bodies, inflammatory strictures and extrinsic pressures can be determined, but the diagnosis of bronchiectasis cannot be confirmed by bronchoscopy alone. Iodized oil bronchograms with adequate bilateral filling of all five lobes constitute the *only* way of making an accurate diagnosis of the disease and its extent.[3] The importance of filling the apparently uninvolved lobes is apparent when the selection of patients for surgery is discussed later.

PROGNOSIS WITHOUT SURGICAL TREATMENT. The prognosis of bronchiectasis victims is extremely poor. The morbidity is high from both a physical and mental standpoint. Recurrent episodes of pneumonia, frequent hemorrhages, increasing dyspnea, a frequently rest-disturbing cough, abundant foul expectoration, all cause a gradual deterioration of the patient. Empyema, metastatic abscesses, and pneumonia are the common causes of death. It has been reported that 38 per cent of bronchiectasis patients are dead within six years after the diagnosis is made.[7] Other reports[4] substantiate these figures and, if complete disability is included with the mortality figures, the salvage of reasonably well patients several years after diagnosis is extremely small. A consideration again of the pathological changes of the disease should not make this statement seem too radical.

CONSERVATIVE TREATMENT VS. SURGICAL TREATMENT. After the establishment of the diagnosis of bronchiectasis by bronchography, each case should be tentatively classified as a candidate for either medical (conservative) or surgical (radical) treatment. For conservative treatment are selected those patients with advanced bilateral disease, those in the upper age brackets or with other diseases rendering them unfit for operative treatment, and those with minimal disease and minimal symptoms. All others must be considered as candidates for radical treatment in the light of the present success of surgery and the poor prognosis without it. The conservative management will bring marked remission of symptoms in many patients, but unfortunately the remission is not lasting because the disease is *not*

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cured. Postural drainage, multiple bronchoscopic treatments, courses of chemotherapeutic agents, both sulfonamides and penicillin, and correction of coexisting sinusitis, will bring improvement temporarily, particularly during the episodes of pneumonic flare-up. The bronchoscopic application of sulfonamide powders has brought disappointing results in most cases. The lately publicized aerosol containing an antibiotic is a much more logical method of applying drugs locally because of the longer lasting contact of the drug with the bronchial tree; but, in my opinion, this procedure also must be used only as a valuable adjunct in the conservative management of cases not suitable for surgery or in the preparation of patients for surgery.

To be emphasized is the fact that many advanced cases of bronchiectasis, obviously too ill for pulmonary resection when first seen, may be improved by the conservative treatment to such an extent that they become reasonable surgical risks.

It must also be mentioned that bilaterality of the disease *per se* does not always contraindicate resection. Advanced changes in one lung with minimal changes in the other may frequently be operated upon with good results. Also, with disease localized to one lobe (or perhaps one lobe and the adjacent portion of another lobe) in each lung, bilateral resections are possible and have been performed numerous times in some clinics.

SURGICAL TREATMENT. The operative treatment of bronchiectasis consists of ablation of diseased tissue by either segmental lobectomy, complete lobectomy, or total pneumonectomy. The collapse therapy advocated in the past is contraindicated.

The technique of pulmonary resection must be reviewed because the present study reports what we believe is an improvement in the generally accepted manner of operation and post-operative care. Anesthesia is maintained by a nitrous oxide-ether mixture administered by the closed intratracheal route. The surgical approach is postero-lateral with resection of an appropriate rib for exposure, and the pleural space is entered through the periosteal bed of the resected rib. The involved lobe or lung is mobilized by dividing the pleural adhesions and by developing the interlobar fissures. An attempt is always made to isolate individually the hilar structures and this is almost always possible in pneumonectomies. However, the incompleteness of the inter-lobar fissures renders individual isolation of the lobar hilar vessels and bronchi impossible in well over half the cases and a tourniquet amputation of the lobe must be performed, ligating en masse the hilar structures (Table III). Incomplete fissures are developed artificially by clamp division of the pulmonary tissue. When a true individual isolation technique can be accomplished, the vessels are triply ligated with heavy silk and the bronchus is closed with fine interrupted silk sutures in one layer. The tourniquet mass ligations are accomplished with a suture ligature of heavy silk, followed by individual ligation of vessels found in the hilar mass, and individual suture of the bronchi. With either technique the bronchial stump is always covered with a pedicle or free pleural graft. Sulfanilamide crystals (about four grams) are implanted in the pleural space and a layer closure of the chest wall with chromic catgut accomplished. Following pneumonectomy the pleura is never drained. Formerly a large tube used in the manner of a closed drainage was employed in all lobectomies, this drainage being maintained until expansion of remaining pulmonary tissue was complete and the inevitable empyema had been obliterated. With the advent of penicillin we felt that it would be permissible to close the chest completely and to depend on aspiration of the pleural fluid to maintain expansion of the lung with the intrapleural injection of penicillin to maintain asepsis. This practice has been thoroughly tested now and the results have been spectacularly improved.[8]

TABLE III
HILAR TREATMENT IN LOBECTOMIES

	Pre-Penicillin Group	*Penicillin Group*
	14 Cases	36 Cases
Tourniquet	11	16
Individual Ligation With Division Pulmonary Tissue	3	14
Clamp Resection	0	2
Individual Ligation Division Pulmonary Tissue	0	4
	100%	89%

Adequate blood replacement during the operation is essential. We have found by actual measurement that the average patient undergoing pulmonary resection loses 1500 to 1700 cc. of blood, and whole blood must be administered in equal amounts.[10] It is particularly important to anticipate the large loss and give blood upon beginning the operation. The greatest loss occurs usually within the first hour.

It is now our routine to inject 50,000 units of penicillin into the pleural space at the close of the operation, and daily thereafter for seven days. The pleural space is aspirated each day prior to the penicillin injection. The volume of fluid recovered diminishes from about 400 cubic centimeters on the first post-operative day to a few cubic centimeters at the end of one week, after which aspiration is rarely necessary. To facilitate the removal of the larger quantities of fluid during the first few days of acute post-operative discomfort, we have left a catheter in the pleural space through a minute intercostal stab wound, clamping the tube completely except at the time of aspiration. The tube is removed on the second or third post-operative day, and thoracentesis by needle is performed thereafter.

RESULTS. During the period of this study (September, 1942, to April, 1946), 267 cases of bronchiectasis were diagnosed in the University of Virginia Hospital (Table IV). Of these, 55 were treated by pulmonary resection; 50 by lobectomy;

TABLE IV

PULMONARY RESECTION FOR BRONCHIECTASIS

267 Cases Bronchiectasis Diagnosed

Lobectomies	50
Pneumonectomies	5
Total	55

Pre-Penicillin Series		*Penicillin Series*	
Lobectomies	14	Lobectomies	36
Pneumonectomies	0	Pneumonectomies	5
Total	14	Total	41
Deaths	0	Deaths	1
Mortality	1.8%		

and 5 by pneumonectomy. There were 14 lobectomies in the pre-penicillin series, and 36 lobectomies and 5 pneumonectomies in the penicillin series. There was one death among the 55 cases, a mortality of 1.8 per cent. This single death was a nine year old child with bilateral disease, who died of cardiac arrest caused by a vago-vagal reflex as her operation was being completed.

A comparison of the post-operative complications shows the real value of the use of penicillin (Table V). The 14 lobectomies in the pre-penicillin series show an incidence of 100 per cent empyemas; 57.1 per cent bronchial fistulae; and 14.3 per cent chest wall infections, whereas the 35 lobectomies in the penicillin series show an incidence of 5.7 per cent empyema and fistula with no wound complications. The five pneumonectomies in the penicillin series had no complications.

A similar contrast in the two groups is evident when the post-operative debility is studied (Table VI). The average post-operative day out of bed in the pre-penicillin series was 23.2, while the aver-

TABLE V

POSTOPERATIVE COMPLICATIONS

	Pre-Penicillin Group		*Penicillin Group*	
	Pneumonectomies	Lobectomies	Pneumonectomies	Lobectomies
	0 Cases	14 Cases	5 Cases	35 Cases
Bronchial Fistula		8 (57.1%)	0	2 (5.7%)
Empyema		14 (100%)	0	2 (5.7%)
Chest Wall Infection		2 (14.3%)	0	0

age day in the penicillin series was 9.0. Similarly, the average post-operative day of discharge was reduced from 32.8 to 20.1. The usual post-operative day out of bed is now the fourth and the day of discharge the fourteenth, but many of these patients were operated upon before the popularization of early mobilization, and thus the averages are much higher.

The two failures to prevent empyema and bronchial fistula in the penicillin series occurred in extensive resections, leaving a large dead space with the remaining pulmonary tissue bound to the pari-

TABLE VI

MORBIDITY

	Pre-Penicillin Series	*Penicillin Series*
Lobectomies		
Avg. P.O. Day out of Bed	23.2	9.0
Avg. P.O. Day of Discharge	32.8	20.1
Pneumonectomies		
Avg. P.O. Day out of Bed		10.2
Avg. P.O. Day of Discharge		18.6

etal pleura by adhesions, thus limiting the expansion. One of the two cases was cured by further aspiration and penicillin injection and did not require drainage, and the other required late drainage and a modified Schede thoracoplasty. An analysis of these two failures has led us to believe that they were due to a long-standing post-operative dead space. We now do an incomplete thoracoplasty at the time of lobectomy on such cases to diminish the size of the space. This, however, is rarely necessary. It is interesting to note that the two failures to prevent empyema and bronchial fistula occurred in the first 14 lobectomies so treated, with no such complications in the last 22 cases. Recognition of the danger of a prolonged dead space in the pleural cavity and the ability to prevent this by foresight

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at the operating table has probably caused this improvement.

In conclusion, we believe the failure of others[1] to duplicate the low incidence of empyema and bronchial fistula with the use of penicillin post-operatively in pulmonary resection is due to the fact that the pleural spaces have been drained for a few days at least, and that in the most important period, the first few post-operative days, the concentration of intrapleural penicillin cannot be maintained in the presence of a drain.

We have seen no necessity for this temporary drainage and have seen no complications from its omission. Other series of cases published have differed in no other essential features of management. Parenteral penicillin, used also in our cases, has not resulted in the reduction of the morbidity which has been possible in the present series by the additional use of intrapleural penicillin in a *closed* space. Furthermore, by maintaining an intact pleural cavity, negative pressure induced by daily aspiration is maintained, facilitating rapid expansion of the remaining pulmonary tissue, rapid obliteration of the pleural space, and therefore minimization of bronchial fistula and empyema.

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Radioactive Iodine Arrested Cancer in Hyperthyroid Man.

Radioactive iodine was effective in the treatment of a man with a malignant thyroid gland tumor, according to three New York investigators writing in the December 7 issue of *The Journal of the American Medical Association.*

The authors are S. M. Seidlin, M.D., L. D. Marinelli, M.A., and Eleanor Oshry, B.S., from the Medical Division and Department of Medical Physics of the Montefiore Hospital and the Physics Department of the Memorial Hospital.

The investigators state that the patient, who in 1923 had his thyroid removed, "was in apparent good health for 15 years." In 1939 he suddenly showed all the symptoms of an overactive thyroid, such as nervousness, loss of weight and a rapid beating of the heart. In addition, severe pains developed in the lower back and radiated down the legs. Examination revealed a malignant tumor which had spread from remaining thyroid tissue.

Subsequently, other cancerous tumors were found in the lungs, thigh bone, second rib on the left side, small intestine and skull. In 1943 treatment with radioactive iodine was begun after x-ray and drugs proved ineffective. It was administered by mouth in the form of sodium iodide in water. "Definite and lasting clinical improvement followed," state the authors.

In 1944 and in 1945 additional treatment with radioactive iodine was given with a "resultant disappearance of pain, increase in weight and progressive change in all clinical criteria in the direction of hypothyroidism [decrease in thyroid activity]. Roentgenographic [x-ray] evidence pointed to an arrest if not a regression of the disease," states *The Journal* article.

In conclusion the investigators say that "radioactive iodine seems to be an effective therapeutic agent in the control of this type of tumor."

THE APPLICATION OF THE PRINCIPLES OF EARLY AMBULATION TO SURGICAL PATIENTS*

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It is quite pleasing to review the past and appraise its successes, which indeed are very numerous. In that review of our past and current work, we routinely observe relative advances in physiology and biochemistry. These advances impose on us the natural question of whether or not the utilization of that increase in knowledge, properly planned, will or can lead to a better day for our patient.

Surgical procedure and postoperative care should go hand in hand with our increased understanding of physiology. One of my reasons for making this report is that a better understanding, from numerous clinical visits and other study, has revealed to me the hazard of long bed rest in patient care.

Physicians are loath to recognize that a cardinal physiologic principle of postoperative care is constantly being violated by the habit of immobilizing surgical patients. We stand indicted as persons not willing to give up a habit, or routine, in favor of a better practice for which there are anatomical, physiological, biochemical, and psychological reasons for so doing. Confining surgical patients, therefore, for long periods is a tradition handed down from James Hilton,[1] and others. Because these doctrines have gone unchallenged to a great extent, prolonged bed rest continues to be a regular practice with many surgeons. At this point I wonder why habit defeats reason. Personally, I know that we hold our teachers in high esteem and there is still evident reluctance to cast aside teachings of the past. We have the usual, or a little more than usual, amount of fear of disaster. Furthermore, we realize that the court of public opinion does not understand our scientific reasons and will tolerate the departure poorly. That attitude of the public is quite understandable because our reasons for adopting the practice would not ordinarily be included in general culture.

Patients who are ambulatory during the immediate postoperative period exhibit conspicuous subjective improvement. If the patient's well-being and prompt recovery are acknowledged to be the prime consideration in treatment, it becomes us to reverse our thinking and adopt a more physiological approach to the problems of rehabilitation and prevention of complications. I believe the time will surely come when all will agree that proper exercise to promote rapid healing and avoid postoperative complications will be generally accepted, just as we accept the fact that aseptic technique must be used to prevent infection.

Historically, the practice of early ambulation, which I favor, is, as you know, not new. Ries,[2] in 1899, reported a series of cases. Another series of six thousand cases was reported by Zava,[3] in 1940, and altogether one hundred and twenty-six reports have been made favoring the practice. I, personally, know more about the work of Leithauser[4] and Shouldice,[5] and, from numerous visits to their clinics, their results are indeed revealing.

Many eminent men in surgery have only recently adopted the practice of early ambulation. Dr. Evarts Graham,[6] in the Year Book of Surgery, 1943, commented editorially on the first Leithauser report by saying that something must be wrong with the early rising practice because it had been tried so often and didn't seem to stick and it was his choice to follow the doctrine of Hilton. This master surgeon, today, approves the practice, as expressed in personal communication, July, 1946, and I interpret the change of point of view of this wise personality as an example of greatness, the greatness of his mind being the ability to forget as well as learn.

From my own experience of one and one-half years with this practice, it is interesting to observe the opening sentence in Ries' report to find how nearly his language coincides with my experience fifty years later. His opening sentence was: "The purpose of these changes which I have worked out within the past four years has been to free patients from many irksome and disabling features of after-treatment as usually carried out, and at the same time to make their recovery more rapid and more complete so that they are able to leave the hospital at a much earlier date than has been customary and in such condition of strength that they can follow their wonted occupation within a few days after discharge from the hospital".

*Read before the Richmond Academy of Medicine, January 14, 1947.

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This brief historical report of early ambulation after surgery would not be complete if we did not emphasize that it is a logical development in the progress of surgery. You recall the various milestones, beginning with anæsthesia and ending with chemotherapy. So, all that I am saying now deals with the control of pathological physiology which is likely to exist in surgical patients if the bed period is too long. My own conception of early ambulation is ambulation during the *immediate* postoperative period.

Figure I represents a limited variety of operations because the practice was applied to the operation, herniorrhaphy, for one year before it was used generally. I do not observe any physiological or anatomical reason that prohibits wider utilization. The anæsthetic agent in all cases was procain infiltration, except the vaginal plastics, which were performed under spinal anæsthesia, and both hysterectomies were supplemented with pentothal sodium in small quantity. Not any received narcotic drugs postoperatively, the capsule of aspirin and nembutal being adequate; not any were catheterized; all had soft diet for the first postoperative meal and general diet thereafter, but it was not always consumed; all had skin clips removed at the end of twenty-four hours. Complications recorded are two small superficial hæmatomas, which in no way prolonged disability period, and resulted from poor hemostasis and not ambulation. These cases represent a cross section of people: one a physician; one a dentist; business men; laborers; and a few women. Sixteen of these cases were ambulatory in the operating room, three of which were appendicitis with perforation.

In adopting this change in postoperative care, the very large subject of physiology takes first place. Our objective is how can we engage in the laparotomy syndrome with minimal disturbance to normal physiology, and how quickly can the damaging effect to physiology by trauma, drugs, and body reactions, be restored.

It would be a large task to discuss the effect of trauma, drugs, and reactions on the respiratory, circulatory, and gastrointestinal systems, but that influence is the background of my point of view and explains why my series did so well and were so happy.

RESPIRATORY COMPLICATIONS

As concerns respiratory complications, it is regretted that time will not permit a full discussion of respiratory physiology, the part played by the diaphragm, the mechanism of the formation of mucous plugs, the cough reflex, the relationship of pleural and abdominal pressure, and other general influences on vital capacity. So, without full discussion, I shall ask you to agree that surgery cripples respiratory function and that immobilization in bed is not conducive to good pulmonary ventilation. The work done by Churchill,[7] and proved to be true in my small series, proves that vital capacity returns to normal in three days in the ambulatory patient, and twelve to fourteen days in the immobilized patient. The experimental work of McMichael and McGibbon[8] also emphasizes that fact when they report that in the recumbent position the fully expanded lung is diminished by 340 cc. the decrease in volume being the result of pulmonary congestion. It is logical to conclude that the threshold of pulmonary ventilation is low in recumbency, and, unless that low threshold is compensated for, or offset, by deep breathing, coughing, and walking, the pathological physiology with which you are familiar will obtain. It should be remembered, anatomically, that the respiratory system is the only system which func-

Figure I

JULY 10, 1945 TO DECEMBER 10, 1946

Type of Operation	*Number of Cases*	*Hours in Bed*	*Hospital Days*	*Complication*
Herniorrhaphy	69	530 — *(7.6 average per pt.)*	301 — *(4.4 average per pt.)*	0
Appendectomy	15	34 — *(2.3 average per pt.)*	53 — *(3.5 average per pt.)*	0
Vaginal Plastic	3	14 — *(4.7 average per pt.)*	22 — *(7.3 average per pt.)*	0
Interposition (Watkins)	2	24 — *(12 average per pt.)*	9 — *(4.5 average per pt.)*	0
Hysterectomy	2	16 — *(8 average per pt.)*	13 — *(6.2 average per pt.)*	0
Cholecystectomy	1	4 — *(4 average per pt.)*	6 — *(6 average per pt.)*	0
TOTAL	92	622 — *(6.8 average per pt.)*	404 — *(4.3 average per pt.)*	0

Figure 1. Ninety-two consecutive operations that were ambulatory from two to twelve hours postoperatively. Sixteen of these cases were ambulatory in the operating room. Hospital period averaged 4.3 days.

tions against a special handicap of draining uphill, and I strongly favor utilizing voluntary coughing as early in the postoperative period as possible.

CIRCULATORY COMPLICATIONS

In giving consideration to circulatory changes, we are again confronted with the big subject of physiology and a complex chain of events even more important than those referred to. Trauma, the same agent, is the stimulus that initiates reflex reaction to the vasomotor system. These reactions which result from fear and pain and other reactions bring about vasoconstriction of some vessels and vasodilatation of others. This results in the pooling of stagnant blood in the legs and viscera and consequent loss of blood volume, inadequate distribution of nutriment, and removal of waste from the tissues. Accordingly, there is circulatory stagnation, anoxemia, and increased capillary permeability, which leads to peripheral circulatory collapse. This pathological physiology relating to the circulatory system is increased by inactivity for the reason that activity and tone of the voluntary muscles is a prominent factor in controlling blood supply. It follows, then, that the dysfunction, initiated by reflex changes incident to operation and aggravated by confinement to bed, is a conspicuous factor in the development of the thromboembolic syndrome. deTakats[9] has shown that these reactions also greatly influence the fibrinogen value, which we know to be dangerous in stagnant blood. He referred to the increase of fibrinogen as a normal physiological response, but we do not wish for it to be at a higher than normal level when blood velocity is slow. It is, furthermore, learned from this same worker that the traumatized area, along with mild hemorrhage, liberates a thromboplastic agent. This substance has many names and presently is called thrombokinase, which, theoretically, is essential in the formation of thrombin, an insoluble protein not found in normal blood.

I do not argue that the increase in fibrinogen value, which obtains in all surgical patients, alone will cause thrombosis. But the increase of fibrinogen, the presence of thrombin, if I am correct in that belief, in stagnant venous circulation, with mechanical pressure added on a collapsed vessel and not corrected by walking, furnishes a favorable site for the deposition of thrombocytes and subsequent thrombus formation.

In the thromboembolic syndrome, a thrombus has to obtain some maturity and size before the embolus separates itself and is fatal or troublesome, and while that takes place in the large veins, our main interest is in the point of origin. Neuman[10] has conducted extensive studies on this subject and I believe him to be correct in concluding that the site of origin is in the calf region most often, and the plantar region next. In 1941, Barker,[11] from a Mayo Clinic study, discussed venous thrombosis, statistically, commenting chiefly on how often phlebothrombosis, the serious circulatory complication, develops without warning. His study included three hundred and forty-three cases of fatal pulmonary embolism, and found that only eighteen cases, or 5.2 per cent, had been diagnosed clinically. That report impresses me as an unfortunate circumstance, but we know it to be true, because of the difficulty of bisecting the syndrome into the two phenomena. The patient's life may well depend upon the physician's differentiation between phlebothrombosis and thrombophlebitis, as symptoms, etiology, treatment, and seriousness are quite different in the two complications. Phlebothrombosis is more difficult to diagnose and is potentially fatal.

Apperly,[12] in public lectures, has stated how often we ignore the musculature of the extremities in considering circulatory changes. He invites our attention to the fact that complications seldom develop in the hands and arms and that we are wrong in not utilizing the leg muscles as an aid to decreasing circulation time. The correctness of his belief is borne out by the work of Baker and Sedwitz[13] in their

Figure II

	Cases	*Atelectasis*	*Threatened Atelectasis*	*Thrombophlebitis*	*Phlebothrombosis*	*Deaths*
Leithauser	2047	0	2	2	0	14
Shouldice	1150	0	0	0	0	1
Trice	92	0	0	0	0	0
	3289					

Figure II, of 3,289 consecutive cases that were ambulatory during the immediate post operative period, emphasizes the absence of the serious circulatory complication, phlebothrombosis.

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studies of venography, which illustrates that the diodrast spreads to the femoral vein in fifteen seconds in the walking patient and that it remained in the leg fifteen minutes and longer in the immobilized patient, a nice example of the importance of muscular activity. I, for one, believe that exercise of the legs is essential in preventing thrombosis and, as Leithauser has pointed out, there is no exercise that equals walking. He also points out, with excellent physiological argument, that those changes which lead to thrombosis are present early, at the time when trauma and effect of drugs are offering their maximum influence. So, no plan other than early walking and coughing will suffice. His series of cases proves that walking can be enforced safely during the immediate postoperative period.

Figure III
Figure III is that of an incision twenty-four hours old after skin clips had been removed.

I have not had any experience with heparin or dicumerol, and, as of the present, believe that I will not need either one, because I believe that simple, natural methods of restoring normal physiology, as advocated and used by Leithauser, are superior to clever, ingenious, or fancy though scientific, methods. I hesitate to say that the use of these drugs has no place in surgery, but I do believe their use is directed to a complication, which ordinarily would not exist except for an unphysiologic practice, which is prolonged bed rest. The patient should have the benefit of walking and there is no substitute for it.

GASTROINTESTINAL COMPLICATIONS

There is much to say about the harmful effects of distention, especially what causes it, and without a physiological explanation, which would be lengthy, I shall abstract my belief by saying that it is beneficial and protective to have a loss of motor function during the early hours of healing, but, if inhibition to motor activity is prolonged, serious consequences develop, directly from confinement and indirectly from crippled respiration, crippled circulation, and loss of muscular tone.

Figure IV
Figure IV illustrates a very comfortable and satisfactory dressing. This patient was ambulatory in the operating room.

COMMENT

It is difficult to convey the extremely favorable impression made on me by the departure from a firmly entrenched routine of postoperative care. The favorable reasons for this practice do not lend themselves well to any general description which equals the experience of observing these patients. Emphasis has been directed toward physiological consideration in surgical management, especially to a routine that prevents "deconditioning".

Contraindications to early ambulation after sur-

gery are extremely few. Clinically, profound shock and prediction of fatal outcome are the only two. Technically, unanatomical incisions and poor choice of suture material.

Infection, peritonitis, fever, and moderate circulatory deficiency do not contraindicate walking. The latter circumstances do, however, involve the judgment of the surgeon.

Early ambulation restores nitrogen equilibrium promptly, which shortens the lag period of healing.

Local infiltration has proved to be a very satisfactory anæsthetic agent.

SUMMARY

1. Prolonged bed rest has been practiced because of respect for tradition and fear of complications.
2. Immobilization of surgical patients violates physiological principles and contributes to postoperative complications.
3. Early ambulation is a logical step in the progress of surgery and offers an excellent perspective.
4. There are definite anatomical, physiological, psycological, and economical advantages to the practice of early ambulation.
5. Ninety-two cases of major surgery presented in Fig. I show that the average bed period was 6.8 hours and the average hospital stay was 4.3 days.
6. Review of three thousand, two hundred and eighty-nine cases summarized in Fig. II indicates that respiratory and circulatory complications have been reduced by early ambulation and voluntary and involuntary coughing.

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Trace Sensitivity to Playing Cards.

Certain chemicals which are used in the finish of playing cards may cause a rash due to the hypersensitivity of the person, according to the December 7 issue of *The Journal of the American Medical Association.*

Answering a query on which of these chemicals might produce a contact dermatitis, *The Journal* states:

"The ordinary playing cards are made of paper and stiffened with sizings. Sizings may be any of the natural or synthetic resins or such substances as sodium silicate. Any of the synthetic resins, if they are not completely cured, may cause sensitization dermatitis. Of the natural resins, rosin is the best known sensitizer. Sodium silicate, water-glass, has not been reported as the cause of sensitization dermatitis.

"Within the past few years there have appeared on the market washable playing cards which are made of synthetic plastics. If these are incompletely cured they may cause dermatitis, just as may the synthetic resin sizings. In instances in which the dye comes off the playing cards, it is possible that some one may be sensitive to such dyes."

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PSEUDO-MASTOIDITIS*

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The appalling lack of necessary dental care for the average person is patent to every otolaryngologist. This happens in spite of the fact that we are constantly bombarded *via* the radio, by some pseudo-benevolent manufacturing house, whose announcer regularly interrupts the radio program every 10 minutes to bawl into our long suffering ears the marvellous merits of his particular brand of tooth paste or powder, the use of which will immediately transform the purchaser's teeth to brilliance and perfection, whether or not the teeth are irregular, gnarled, broken or carious.

After all this he piously advises his hearers to visit their dentists every 6 months, which of course 99% ignore. It is an ironic euphemism to refer to the lack of dental care of the "average" person. The real fact is that, as the patients come and go in the otolaryngologist's office and their mouths are examined routinely, practically all of them are either suffering from present or past lack of dental care. The majority are suffering from decayed, lost, infected, or carious teeth, gums or jaw bones, ill-fitting bridges, inlays or false teeth plates. One wonders at some of the alleged sets of false teeth whether or not we have progressed much since the start of the last century and a half when George Washington was said to have been blessed with a set of false teeth which weighed one pound avoirdupois.

Particularly the children's teeth are a mass of decay, infection, vitamin and mineral deficiency, laying the foundation for undeveloped jaw bones, mouths, cheeks, high arched palates, receding or prognathus chins, from which there is no relief as the condition becomes stabilized with the growth of the children. Just before the child enters school at 6 or 7 years of age, the parents, who are worn out with the incessant colds, sore throats, upset stomachs and bowels, to say nothing of measles, whooping cough, scarlet fever and all the other so-called unavoidable children's diseases that have made life a thing of torment for both mother and child, dutifully bring the child to the pharyngeal surgeon to have his tonsils and adenoids removed, absolutely certain of the fact that this operation will counteract the results of all the above catalogue of horrors and prove a panacea for good health ever afterwards.

It is superfluous to call attention to the rising tide of medical literature refuting such claims. As we examine these little sufferers, we are forced to the observation that what most of these children need is not the tradition T & A but a thorough oral overhauling by the dentist. In short, their teeth are simply a mess.

This brings us to the object of this paper. Patients are constantly being sent to our offices or coming of their own accord, complaining of earache, wanting X-rays taken of their ears and mastoids, believing themselves in imminent danger of severe aural or mastoid disease. They complain of severe earache, pains over the mastoid, behind the mastoid, over the occiput, behind the jaw, under the jaw, down the neck, back of the neck, etc. A few exemplary cases will serve to illustrate this syndrome.

Case I. P. H., age 32, white male, came to the office 6/27/43 complaining of right earache, with pains radiating in front of the ear and over the mastoid, also over the maxillary bone and radiating down the neck. He said that he had suffered from it almost incessantly for the greater part of a year. Examination of the ears, nose, throat and eyes was negative. This appeared to me to be more in line with what Sluder has so carefully outlined and developed in his syndrome.

Thereupon I proceeded to anesthetize the right sphenopalatine ganglion. As in all these therapeutic measures, the psychic influence upon the patient produced a passing relief and the patient left feeling that his condition was improved. However, about 6 months later I met the patient who informed me that the pain returned soon after leaving my office and he had finally decided, since it was not his ear nor his nasal ganglion that was causing his trouble, it must be his teeth. He therefore went to his dentist who found an impacted wisdom tooth in his right upper jaw; he extracted the tooth and cured the patient.

*Read before the Buchanan-Dickenson County Medical Society on August 28, 1946.

This emphasizes what, with the passing of Sluder and the lapse of time, is becoming more and more evident, that the syndrome he so beautifully worked up and firmly believed in, is disappearing from medical lore. As a matter of fact, the British have always been hesitant about accepting this syndrome, and it has been years since much about it has been published in American medical journals. Certainly in this case I was entirely wrong in supposing such a diagnosis. The proximity of the impacted tooth to the ear caused the pain to be referred to the ear and confused the patient in his interpretation of the symptoms.

Case 2. M. P., age 43, white female, was seen 3/4/45 complaining of pain in the left side of her head, radiating over her maxillary bone, temporo-maxillary joint, ear, mastoid and occipital region, also involving the opposite side of her head. Examination of the eyes, ears, and nose was negative. On looking into her mouth there was a vast denuded area of scar tissue about the size of a half dollar on the inside of the left cheek. Considering her age and the alarming appearance of the lesion, she was suspected of having an incipient malignancy of her cheek. The condition was watched and treated with silver nitrate, astringent mouth washes, X-ray, and what have you. In spite of all treatment the condition grew steadily worse and the area became more and more inflamed and more and more enlarged. On questioning her one day I asked her concerning her teeth. All her molars and bicuspids were absent from her lower jaw. In order to chew she had to push all her food forward. She said that this maneuver caused her to force her left cheek inward so that every time she chewed the upper back teeth scraped her left cheek, causing this continued irritation in spite of all treatment. The patient was advised to go to her dentist and have a partial plate made so as to replace the missing back teeth, allowing her to chew her food in a natural manner. So far as I know, she eliminated the irritation to her cheek and effected a cure of what was suspected of being a malignancy; indeed this would certainly have resulted had the offending dental condition not been corrected.

Case 3. E. T., age 34, white male, consulted me at the office 3/16/46 complaining of right earache. He gave no history of previous ear trouble nor was there any discharge from the right ear. His pain radiated all around the ear over the parotid and mastoid region. Pressure over Ewing's point on the right side elicited pain, lending the impression of frontal sinusitus. There was numbness of the right roof of the mouth. He had an upper plate, but no lower plate, yet all lower back teeth were missing. He says he chewed on his right side between his upper and lower front teeth. Examination of the eyes, ears, nose and throat was negative. X-ray of sinuses was negative. He stated that the pain in his ear had lasted for a long time and that the condition was growing worse in spite of treatment over that period. He had run the gauntlet of all the usual treatments: ear drops, salicylate, sulfonamides, diathermy, X-ray, etc. Realizing there was nothing wrong with the ear, I decided it was due to the malocclusion of his teeth and improper mastication and advised him to see his dentist and have a proper prosthesis made to eliminate his dental defect.

Case 4. D. T., age 22, white female, complaining of severe right earache off and on for the past 2 or 3 months. Her pain radiated over both temporo-maxillary joints, more so over the right side. Pain extended over right ear and mastoid and radiated to the occiput, submaxillary region and over the whole right side of the cervical region. The cervical glands were only slightly enlarged and not acutely inflamed. Examination of the eyes, ears, nose and throat was negative. Her tonsils had been removed when she was 6 years old. She had no upper teeth of her own but had an entire upper plate. All her lower teeth were gone except a right decayed molar that was flush with the gum and useless for chewing purposes, also a few loose lower front teeth that were oozing with pus all around them from pyorrhoea. She said that she chewed her food between her front teeth as best as she could. Patient was advised to see her dentist and have all her lower teeth extracted and a lower plate fitted which would render her bite normal and enable her to masticate her food properly.

COMMENT.

These are just a few examples of cases that can be multiplied indefinitely from the practice of every otolaryngologist in almost every day of his practice. Teeth as a source of infection directly and by metastasis have long been incriminated as a source of human suffering, and myriads of teeth have been sacrificed, mostly with salutary results, although, as in any new discovery, this fact has been used many

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times injudiciously with the loss of many sound teeth.

It should be remembered there are possibilities of pathological sequelae of malocclusion of teeth complicated by incorrect bite and dislocation of the temporo-maxillary joint both temporarily and later on permanently with the wearing away of the articular cartilage and erosion of the bone neighboring on the joint. The cartilage in many cases becomes dislocated. When a patient has to chew on his front teeth there is a circular motion to the side of the bite in which the mandible is alternately thrown into the exaggerated positions of recession and prognathism. This is wholly unnatural and causes a motion of the temporo-mandibular joint that causes wear on the periphery of the joint, and stretching of the joint capsule. The muscles of mastication are also thrown out of their normal masticatory alignment, causing stresses and strains that are quickly reflected in the sensorium of the patient, resulting in the pain that finally brings him to the doctor. The wear on the joint sets up a chronic inflammation of the cartilage, periosteum and mucous lining of the joint. This is in close proximity to the ear and the patient is deluded into the belief that he has ear trouble. Most of these patients present a most trying problem to the doctor, for he sees no pathology in the ear and yet the patient complains of acute pain that simulates acute suppurative otitis media and demands relief. He suffers so acutely that he is sure he has acute mastoiditis and usually demands an X-ray, which shows nothing and only serves to confuse the situation. The muscular pains radiating all over the head and down the neck make one think of a rheumatic affection. As a result, we resort to the usual remedies—salicylates, sulfonamides, iodides, diathermy, etc., all of which are merely ameliorative and which, although temporarily relieving the pain, do not reach or eliminate the cause of the trouble.

The trouble, of course, is not in the ear nor is the mastoid involved. The cause lay in the teeth, resulting from the lack of the necessary care, in many cases dating from the very first years of the patient's life. It has heretofore been a common belief that nothing can or should be done to the milk teeth, being seemingly oblivious to the fact that a vast amount of work has been done and is being done in the matter of the scientific care of the teeth by proper feeding, hygiene and dental surgery.

Biggest Problem at A. M. A. Session in 1848 Was Epidemics.

When the American Medical Association held its first annual meeting in Baltimore, May 2, 1848, one of the principal points of discussion among the physicians was the progress of epidemics.

In writing a history of the American Medical Association in connection with the centennial celebration in Atlantic City, June 9-13, Dr. Morris Fishbein says that the doctors of that time were especially concerned with the frightful condition of emigrants coming from Europe.

"The Committee on Medical Practice," Dr. Fishbein writes: "called attention to the fact that thousands had perished on voyages to the United States and Canada. From one ship, the Virginia, bound from Liverpool to Quebec, with 470 passengers, 158 were buried at sea.

"During the year 1847, 100,000 souls left the British Isles for Canada. More than 5,000 of these died en route and another 8,000 within a few weeks after their arrival. The disease from which these people perished was typhus in its genuine form, and in some ships smallpox, dysentery and measles swelled the amount of mortality. There was much discussion of the ability to distinguish between typhus fever and typhoid fever."

The history of the A. M. A. is appearing serially in *The Journal of the American Medical Association* and will be printed in book form for the Atlantic City meeting.

THE TREATMENT OF THE PRE-FIBROTIC LIVER WITH ASCITES—REPORT OF A CASE*

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Experimental investigation during the last ten years of the pathogenesis, pathological chemistry and early reversibility of the pathological process in the so-called "alcoholic", portal or Laennec's type of cirrhosis of the liver has awakened new clinical interest in what is now a diagnostic and therapeutic challenge to the modern clinician.

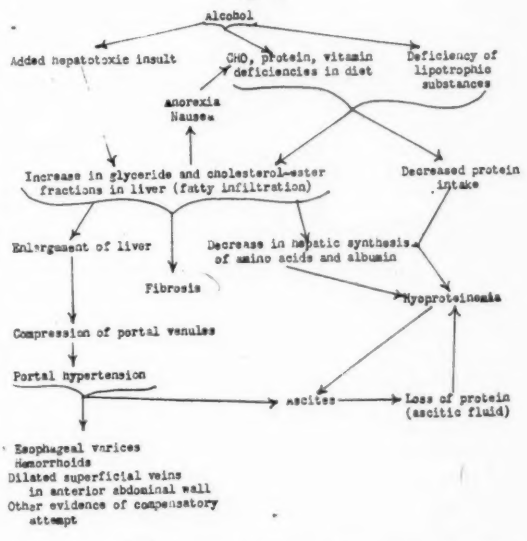
The term "pre-fibrotic liver" has been used to designate fatty infiltration of the liver, which, in the production of actual cirrhosis, or fibrosis, of the liver in experimental animals, has become well-recognized as an early developmental stage,[8, 9, 11, 12, 13] and one which is, for the most part, reversible. Dietary deficiency, rather than alcoholic intake, is now recognized as the factor of primary importance in the development of fatty infiltration,[3, 4, 8, 10, 28, 33, 36, 45, 46, 51] the alcoholic intake of the alcoholic addict acting merely as a discouraging factor to proper dietary consumption, and as an added hepatotoxic insult[11, 12, 13] to hepatic physiology and chemistry already disturbed by a lack of liver-fat-mobilizing or lipotrophic substances[23] contained in the normal diet.

With the development of fatty infiltration of the liver, and with a maintenance of lipotrophic substance deficiency, a self-perpetuating cycle of pathological events begins, which, if undisturbed therapeutically by the clinician, will have as its end result the well-known clinical picture of cirrhosis of the liver with its inevitable outcome.[44]

As a great hepatic protective mechanism,[35] the liver protein store is depleted by this infiltration of fat, and as hepatic protein synthesis decreases[40] and the resulting disturbance of serum proteins develops,[17, 20, 35, 40, 42] not only is the osmotic pressure of the blood lowered, mainly because of the lowered albumin levels, but also is capillary permeability increased.[20] Even greater loss of protein occurs as ascitic fluid collects (Fig. 1).

Enlargement of the hepatic cells, now tense with excess fat content, enlarges the liver and compresses the portal venules, elevating the portal pressure. This combination of forces, acting to produce excessive, extravascular fluid, may be aggravated by a recently suggested hypophyseal, anti-diuretic factor.[42] The resulting ascites,[17, 21] varices and attempted circulatory compensation is familiar to

Fig. 1



everyone. Nothing but disaster can occur as the portal venules are compressed even more as actual fibrosis develops, and as the disturbance in hepatic and reflected physiology and chemistry is increased.

The attention of the clinician must be directed toward early recognition of this pre-fibrotic phase. Any beneficial results must of necessity be obtained only from the patient whose pathological process has not progressed beyond the stage of fatty infiltration.[32]

With the aforementioned dietary deficiencies, the liver cholesterol-ester and glyceride content increases.[23, 41, 43] Therefore, important to the clinician are methods of rapidly mobilizing this excess liver

*Read before Richmond Academy of Medicine, April, 1946.

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fat. Dragstedt's work on lipocaic[23] began a new phase in the study of lipotrophic substances. In the last few years a search for, and an evaluation of, other lipotrophic factors has been made. Particularly have the lipotrophic properties of certain amino acids[19] and of certain members of the vitamin B complex[28, 30, 45] been studied. Brewer's yeast[28, 29, 38, 45, 46, 54] and lecithin,[1, 2] earlier recognized as possessing lipotrophic activity, have been found to owe this potentiality to choline,[2, 5, 6, 15, 16, 18, 22, 25, 29, 30, 34] methionine,[15, 18, 30] casein[15, 30, 34] and betaine,[18, 54] contained therein. Recent work has favored choline or methionine, particularly since each of these has the ability to mobilize both the glyceride and cholesterol-ester fractions.[23] Between these two substances there exists a relationship apparently based upon methionine's labile methyl group.[23, 52, 53]

Investigation of the B complex has suggested that pyridoxine[23] and inositol[23, 24, 25] contain this lipotrophic power, while the other members of the B complex appear to have quite the opposite effect.[23]

Because of the lowered hepatic stores of protein and glycogen produced as fatty infiltration occurs, it becomes obvious that dietary, as well as other measures, are imperative.[7, 21, 31, 37, 47, 50] An adequate protein intake in itself will aid in mobilizing fat. All investigators agree that two or more fat-mobilizing factors are more effective than one.

Apart from the requirements of the fatty liver, a rapid restoral of the disturbed serum proteins is to be desired, with the hope that as the enlarged hepatic cells lose their excess fat, and the liver approaches its normal size, hepatic venule compression will be relieved, and with a restoral of normal serum protein and osmotic pressure levels internal fluid balance will be restored.

It is obvious that salt and fluid restriction are a logical counterpart in this attempt.[14] It has been suggested that, in patients who can tolerate them,[21, 37, 50] diuretics are of assistance in an attempt not only to counteract any anti-diuretic factor, but also to keep the circulating volume low to increase its ability to remove excess, extra-vascular fluid.

The following is a report of one case of pre-fibrotic pathology treated by a regimen based upon the foregoing evidence.

The patient was a white, adult business-man, 47 years of age, when he first sought medical aid on October 25, 1945, three weeks after the onset of constant right upper quadrant and epigastric distress, anorexia, nausea, gaseous eructation, swelling of the abdomen and of the ankles. During the last ten days of this period he had gained 23 pounds. There was no history of vomiting, hematemesis, bloody or tarry stools. There had been no mahogany-colored urine, clay-colored stools or jaundice.

Throughout his adult life he had consumed a half pint of whiskey a day, his food intake suffering seriously from his over-indulgence. There was no history of lues and serological determinations in the past were negative. There was no history of heart disease. His family's history, and the remainder of his past history and of the systemic review were non-contributory.

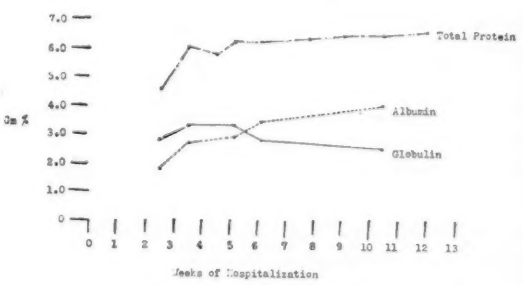
Physical examination revealed a tall, moderately well-developed, but undernourished, pale, white male, who appeared chronically ill, and who had the typical hepatic facies. There was slight dulling of the sensorium. B.P. 140/80; T. 99.2; P. 88; R. 20; Hgt. 5′ 11″; Wgt. 178 lbs. The skin had a dirty hue and lacked turgor. There were no telangiectases. The eyes and the cheeks appeared sunken. The sclerae were muddy and had an icteric tint. The tongue was heavily coated. The heart sounds were normal and the lungs were clear. The abdomen was extremely protuberant and the overlying skin was taut. There were dilated superficial veins in the anterior abdominal wall, but no caput medusae was evident. The umbilicus was everted. Shifting dullness was present in the flanks, and there was definite transmission of a fluid wave. The liver descended three fingers below the costal margin on deep inspiration and was tender. The edge was rounded and the surface was smooth. The spleen was not palpable. There were several skin tags about the anus, the area being somewhat erythematous. There was severe pitting edema of the ankles and about the sacrum.

Laboratory results were as follows: *CBC*-RBC-3.83; WBC-10, 450; HGB-15-5 Gms. Diff.-P.63; L. 21; M. 1; C.I. 1.19. *ESR*-12 mm. in 1 hr. *Urinalysis*-Vol. in 24 hrs. 600 cc. Sp. Gr.-1.031; Alb. and Bile—each one plus. Microscopic examination revealed O-1 RBC and WBC and a rare hyaline cast. *Blood Chemistry*-Ict. Ind. 18. Total Proteins-4.6 gm. per cent; Alb. 1.8 gm. per cent; Glob. 2.8

gm. per cent. Cholesterol (total)-84—repeated 130 mgm. per cent. Determination of percentage of cholesterol-ester, one of the earliest manifestations of this type of pathology was not done.[47, 49] NPN-20 mgm. per cent. Sugar (fasting)-117 mgm. per cent. Wassermann was negative. The Hanger cephalin flocculation test was not done.

The patient was hospitalized the following day and was immediately placed upon an extensive regimen which excluded alcohol. He was given a high vitamin, high carbohydrate, high protein, low fat, salt-free diet and received additional interval protein and carbohydrate feedings. Fluid intake was restricted to 600 cc. He received 45 Gms. daily of an oral preparation of amino acids. In addition to this he was given 3.0 Gms. of methionine orally each day. In the early days of his hospitalization 500 cc. of 5 per cent glucose was administered intravenously daily; however, this was abandoned for 50 cc. of 50 per cent glucose to further restrict the fluid intake. Fifty mgm. of thiamin chloride was given intramuscularly daily. Because of the fear that his damaged liver could not utilize amino acids as building blocks for protein as efficiently as a normal liver, and because it was felt that he required some already formed protein, particularly albumin, while waiting on his own mechanisms, 500 cc. of plasma was given on three occasions. Ammonium chloride and mercupurin were employed, the patient receiving 1.0 cc. of the latter on seven

Fig. 2 - Serum Protein Levels



occasions, decision for use being based upon the apparent state of his internal fluid balance. On the day of admission and two weeks later abdominal paracenteses were done, 4,600 cc. and 5,400 cc. of typical ascitic fluid being obtained.

The patient's course in the hospital was one of gradual improvement. Ascites collected more slowly after the second abdominal tap, but by the seventh hospital week the abdomen was again considerably enlarged by fluid contained therein. Diuresis of 2,500-3,100 cc. was being obtained following mercupurin injections. Because of the lack of distress paracentesis was postponed.

At this time the patient's serum proteins were approaching more normal levels, there having been a correction of the A/G inversion (Fig. 2). Gradually this ascitic fluid was resorbed and there was concomitantly a great change in the patient's general condition. His appetite improved, and there was a disappearance of his epigastric and right upper quadrant distress. His color improved, the icteric tint disappeared, and the liver became reduced in size, the border being sharper and the surface remaining smooth. Peripheral edema disappeared. Esophageal varices and internal hemorrhoids were demonstrated, and at one time there was a small collection of fluid in the left costo-phrenic sinus, but the latter also cleared.

At the time of his discharge from the hospital February 15, 1946, he was feeling well and had no complaints. He was eating well and had gained considerable strength. His facial expression, his skin and his sensorium had improved. The abdomen appeared to be free, or almost free, of fluid. His waist-line had returned to about that of his pre-ascitic days. The liver was smooth, had a definite border and descended to the costal margin on deep inspiration. The macrocytic anemia had markedly improved and there had been a restoral of normal serum protein levels. The icteric index, total cholesterol, prothrombin time, BSP and hippuric acid excretion tests were at normal levels. The urine was free of bile, albumin and sediment. At no time had there been any evidence of hemorrhage into the gastro-intestinal tract. Following discharge, the patient left the city.

A recent communication from the patient's mother, written about six months after the onset, states that the patient is feeling well and is not in need of any medical attention. It is not known whether or not he is cooperating with his hepatic physiology.

SUMMARY

1. There has been a brief discussion of the pathogenesis of cirrhosis of the liver.

2. The importance of early diagnosis of the prefibrotic phase has been indicated and brief men-

tion has been made of methods of combating this pathology.

3. One case of pre-fibrotic hepatic pathology, which exhibited marked improvement, has been reported.

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ACUTE APPENDICITIS—WITH A CASE REPORT*

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It is interesting to recall that appendicitis was described and named by an American surgeon, Reginald Fitz, in 1886, which was not so long ago. Ten years passed before the medical profession was sufficiently aware of the disease to make the operation for appendicitis frequent enough to save many lives. The pendulum swung far during the following ten years, and the operation was probably performed unnecessarily many times. I commenced the study of medicine in 1902, which was at the height of the popularity of appendectomy. I was told at that time of an unconscious bum picked up on the street and taken to Emergency Hospital. They removed his clothing to make an examination and discovered tattooed on his chest the following message, "Do not operate for appendicitis. I have had the operation three times already." The appendix is a prolongation of the cecum and is a tube whose walls are composed of the same four layers which form in the cecum. The lumen is narrow and the mucous layer contains much lymphoid tissue. The blood supply of the appendix is from the ileocecal artery, whose branches traverse the meso-appendix in a fan-shaped pattern. The cecum contains many saprophytic and other bacteria, many of which are pathogenic, and these bacteria must enter the lumen of the appendix frequently. They are swept out again by the mucous which the appendix continually secretes. The appendix may be from one to nine inches long and may point in any of six directions. Usually it lies low in the cecal wall and is surrounded by the cecum, the ileum, the psoas muscle, and the abdominal wall. This is fortunate because, when the appendix is inflamed, this position favors isolation from the rest of the abdomen, and the omentum (the policeman of the abdomen) usually moves over to further protect the diseased area.

Just how a given appendix becomes diseased is not definitely known, but it is assumed that anything which causes a narrowing or a stricture in the already narrow lumen results in a retention of infected material. The lymphatics become loaded and swollen. Pressure interferes with circulation. Thrombosis occurs first in the smaller vessels and then in the larger vessels. Pressure necrosis and perforation may occur, or gangrene may ensue because of lack of blood supply. If operation is done while the infection is confined within the appendix, uninterrupted recovery is the rule, but if the infection extends through the walls, abscess formation or general peritonitis may occur.

The prognosis of appendicitis depends upon three factors:

1. The time of operation.
2. The variety and virulence of the infection.
3. The resistance of the patient.

It is interesting to note that the mortality rate from appendicitis was approximately 5 per cent twenty years ago, and that it is approximately 5 per cent today. The sulfa drugs and penicillin and a realization on the part of the people that they should consult a physician promptly in case of abdominal pain will undoubtedly reduce this percentage. A factor which undoubtedly is a cause for mortality is the administration of cathartics which increase peristalsis, prevent adhesions, and allow dissemination of infection throughout the abdomen.

Appendicitis may be acute or sub-acute and, of course, recurrent. There seems to be no pathological basis for the term "chronic" appendicitis. Acute appendicitis occurs suddenly with moderate crampy pain in the epigastrium or umbilical region. This pain becomes more severe gradually, and nausea or vomiting, or both, may occur. After a few hours, the pain is localized in the right flank, and there is moderate fever and a moderate pulse rise. There is rigidity in the right rectus muscle and the patient lies quietly in bed with the right thigh usually flexed on the abdomen. Polymorphonuclear leukocytosis is usually present. Leukocytosis should not be depended upon for diagnosis. When it is present, it is a confirmatory sign and gives a fair indication of the resistance of the patient and the amount of inflammatory involvement. It is frequently absent, however, in perforated and gangrenous appendices. Some physicians wait hours before seeking surgical

*Read before the Prince George County, Maryland, Medical Society.

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advice until they can obtain a white count, thus jeopardizing the patient's life for an unnecessary procedure. I remember asking Dr. DaCosta of Philadelphia, Pennsylvania, one time if he obtained a leukocyte count as a routine in suspected appendicitis. His answer was, "Yes, two days after the operation." He did not consider it necessary before operation, even in those days. The patient suffering from peritoneal irritation remains quiet in bed because movement of the body increases pain. Thus, the appendicitis patient differs from the patient suffering from renal or gall-stone colic because these patients are continually in motion seeking a more comfortable position.

I have described the usual text-book picture of appendicitis, and, of course, most of the cases follow this pattern. Often they do not, and the experience and skill of the surgeon must tell him that he is dealing with appendicitis.

Once appendicitis is suspected, the patient should be denied any food or drink. He must have *no treatment* until operation is decided upon. After consent to operate is obtained, he may have morphine and ice bag for his comfort. Many people believe that the ice bag has some therapeutic value and that appendicitis may be cured by its application. This is a fallacy. Ice was the first known anesthetic. It diminishes pain by action on the skin nerve endings. Of course, some patients recover after its use, but they would have recovered anyhow. Many first attacks of appendicitis recover spontaneously. Some do not. I do not know anyone smart enough to know which is which. Consider for a moment the distance between the ice bag and the inflamed appendix in a patient lying on his back in bed. In order to influence the appendix in the slightest degree, the cold of the ice must penetrate the skin, two inches or more of abdominal fat, two or more inches of abdominal wall, and two or more inches of space in the abdomen before it reaches the appendix. Of course, the appendicitis is not affected by the application of an ice bag.

It is worth remembering:

1. Appendicitis is the most common surgical disease of the abdomen.
2. Diagnosis may be very easy or very difficult.
3. Immediate operation is advisable.
4. No treatment should be given until operation has been decided upon.
5. If diagnosis is doubtful and it may be appendicitis, operate.
6. Blood and urine should be examined if possible before operation. Leukocyte count is unreliable.

The following list includes most of the conditions which may be confused with appendicitis:

In Children
Pneumonia; Pyelitis
Intestinal obstruction
Peritonitis (T. B. or pneumococcic)
Intestinal parasites
Mumps
Measles

In Young Adults—see above, also
Pleurisy
Typhoid
Influenza
Lead colic
Intermittent hydronephrosis
Nephrolithiasis
Nephroptosis right
Perinephritic abscess
Cholecystitis and lithiasis
Peptic ulcer
Torsion of omentum
Regional ileitis
Diverticulitis
Pancreatitis
Mesenteric thrombosis
Incarcerated hernia
Tumor of abdominal viscera
Epigastric hernia
Food poisoning
Orchitis
Vagotonia

In Young Females—see above, also
Torsion of ovarian cyst or fibroid
Ruptured graafian follicle with hemorrhage
Salpingitis
Ectopic gestation

In Elderly Adults—see above, also
Carcinoma of abdominal viscera
Prostatitis
Tabes dorsalis
Mesenteric arteriosclerosis

This list is quoted from surgical literature and is put here for the convenience of the diagnostician.

The following is a report of an appendectomy with complications:

Mrs. M. G., twenty-five years old, mother of one child four years old, entered Georgetown Hospital on February 16, 1945, at full term, with labor pains. Labor pains ceased and later that day she had

epigastric pain and vomiting. On the morning of February 18, pain became worse, and patient vomited again. I saw her at 2 P. M., in consultation with Dr. J. Bay Jacobs. Temperature was 100; pulse 100; leukocytes 12,700 with a preponderance of polys. There was pain and tenderness in right abdomen. I advised immediate operation for appendicitis. This was done.

Right rectus incision; thin yellow pus escaped when peritoneum was incised. Cecum was located with difficulty because it was adherent to the posterior peritoneal wall and also to the broad ligament (right). The appendix was as thick as the middle finger and was exuding pus from a hole in its side. A fecalith, the size of a pea, lay outside the appendix. In the manipulation to free the appendix, a large vessel in the broad ligament commenced to bleed. This hemorrhage was stopped with great difficulty because the tissues were friable and the sutures cut through. The appendix was removed flush with the cecum and the opening was sutured like a bullet wound. The abdomen was closed around a large rubber drainage tube and a cigarette. The patient was returned to her bed and given 1,000 cc. of whole blood. Five hours later, she went into labor and was delivered of a macerated dead baby. An extensive tear in the perineum required immediate repair. I saw the patient at 9 A. M., February 19. Her dressings were soaked with blood and our vessel in the right broad ligament was evidently bleeding again. Patient was sent to the operating room and the wound was reopened. The same difficulty was experienced in suturing the site of the bleeding which we had the day before. Bleeding was, at last, controlled and the patient returned to bed. Blood transfusions at 3 P. M. and 10 P. M.

February 20; pain in right chest; difficulty in breathing; atelectasis was present. Carbon dioxide and oxygen inhalations were given. This relieved respiratory difficulty and the oxygen was continued until February 23. Commencing February 18, and continuing for five days, sulfadiazine was administered every four hours. Soft diet was started on February 23. On February 25, right parotitis was present. This subsided in a few days under an ice bag. She returned to her home on February 28. On April 1, she was able to resume her usual duties and appeared to be quite well.

This case presents some unusual and interesting points. Appendicitis in late pregnancy is often fatal. The mechanical difficulties presented by a uterus at full term are great. The escaped fecalith; the great loss of blood from the broad ligament vessel; the devitalized tissue; the delivery with the perineal tear; the post-operative hemorrhage; the shock of two operations close together; the atelectasis and the parotitis, all presented hazards to recovery which makes me think of the famous expression of Ambrose Pare who answered words of praise by his king by saying, "I only dressed the wounds; God healed them."

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Six Leading Accidental Causes of Death in 1945.

Motor-vehicle accidents led all other types of accidental causes of death in the United States in 1945, according to the National Office of Vital Statistics, U. S. Public Health Service. Of a total of 95,918 deaths from all accidental causes, 28,076 were due to motor-vehicle accidents. Injury by fall ranked second as a cause of fatal accidents with 23,333 deaths. Drowning, with 5,676 deaths, was third in importance as a cause of accidental death, and burns fourth with 5,105 deaths.

A sharp reduction occurred between 1944 and 1945 in the number of deaths from airplane accidents. In 1945, 3,552 deaths were attributed to this type of accident, or slightly more than half as many as the total of 6,656 for 1944. The decrease which was probably due to curtailment of the aviation training programs of the armed forces brought deaths from airplane accidents to fifth place from a rank of third for 1944. The sixth accidental cause on the list for 1945 was railway accidents with 3,320 deaths.

Deaths from all other accidental causes numbered 26,856 or approximately 1,500 less than the number caused by motor-vehicle accidents alone.

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THE CHOICE OF FORCEPS

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If we have an indication for forceps and are confronted with the multitude of forceps bearing the names of the many physicians who modified them, which instrument shall we use?

To make our selection, it is presumed that the operator has a good working knowledge as to the indication of forceps and the function of forceps and the knowledge of the application of them. The operator should be able to select the kind of instrument most suitable for the condition confronting him. Delivery should be accomplished with usually one, or at the most two kinds of instruments. A greater degree of success will be accomplished with a good working knowledge of all the various forceps. If the reader of this is helped to prevent only one birth injury, or one death of an infant due to cerebral hemorrhage, I shall feel greatly repaid for my small effort or contribution. The proper choice of forceps for a certain position or presentation should and will help prevent birth injuries and still-born babies and injuries to the birth canal of the mothers.

The desire for knowledge should transcend every other interest in every true and earnest physician. The fast-changing realm of medical science, and especially obstetrics, taxes all of us interested in obstetrics as it has never done before. It is a great task and obligation of ours to keep abreast with its rapid pace of progress. Yet, how humiliating it is for us to have to say, "I do not know". At such times one's own evaluation drops very low and chagrin is written on all our expressions—then we begin to wonder how we could have saved this baby. Much of this pity of ourselves can be avoided by reading good books and periodicals and by doing frequent postgraduate work if necessary.

First, let me state that there are a number of good forceps from which to choose, all of which fulfill the requirements of application and traction. Some instruments are simple, others rather complicated. All instruments, it seems to me, have one or more good features which justify their use when properly chosen. Some are very similar, so similar that a choice between them makes very little difference. The Elliott and Simpson forceps are rather similar. In the Elliott the shanks are over-lapped and the cephalic curve is short and more rounded than in the Simpson forceps in which the shanks are separated and the blades have a long tapering cephalic curve. It therefore follows that on moulded heads the Simpson forceps, with their long tapering curve, will usually give us the best application. This usually follows long second stage labor which gives the head time to mould. The choice should usually depend on the type of pelvis and upon the correct diagnosis of the amount of moulding, position and station of the head.

The Hawks-Dennen forceps are the ones that apparently approach the ideal for occiput anterior positions. This instrument includes all the good qualities of the various classical instruments combined into one instrument. The instrument is light and uncomplicated to use. It has fixed axis-traction. The pelvic curve of the tips of the long blades is exaggerated and permits extension over the perineum without injury to the sulci or vaginal floor. While the tips are curved more than in Simpson or Elliott forceps, they are long and are easily anchored below the malar eminences. They have Kielland cushion on the fenestrations which prevents cutting and pressure points. The shanks are springy, not unlike the Piper forceps, and this permits accommodation to heads of different shapes from moulding and to heads of different sizes with the least possible amount of injury or compression to the head.

A correct application is essential. A correct application prevents injuries caused by brow-mastoid applications. In a correct application the blades fit the head accurately and pressure is evenly distributed; the pressure is on the least vulnerable parts and the minimum amount of force is necessary for delivery. It lessens injury to the mother because with a correct application the head advances in the proper axis and attitude, with the expenditure of the minimum amount of traction. Traction was the original use for forceps and is still their most important function.

In the hands of the average practitioner the use of forceps should be restricted to that of traction.

If forceps are to be used for rotators, that should be left for the expert. I have seen dead babies as the

result of the untrained using forceps for rotators. I have seen irreparable damage done to the optic nerve because of brow-mastoid application. A correct application lessens injury to the mother because the head advances in the proper attitude. This is not true with the undesirable brow-mastoid application. When the occiput is anterior, the application is, as a rule, easily made and any classical forceps is satisfactory that fulfills the requirements of the moulding. From other positions and presentations there are several types of relatively new forceps which will be considered.

A high head in a flat pelvis may be angulated in such a position that a cephalic application cannot be obtained unless the forceps have a sliding lock principle. This is found in the Barton and Mann forceps and this position is an indication for their use.

LOW FORCEPS: Most heads are in the anterior position in low forceps. They either have been primarily anterior or have rotated to an anterior position from a partial or complete transverse position. The mother is usually a primipara or perhaps a multipara with a long labor. In either it usually means a moulded head with the sides flattened and lengthened. Here a Simpson type of forceps in which the blades have been lengthened, fits best. DeLee's model is a good forcep to use here. It has a long shallow cephalic curve and the tips of the blades can be anchored well below the malar eminences, preventing pressure points and slipping. In round heads, usually found in shorter labors, the Elliott type is suitable. However, if much moulding is present the Elliott forceps fits unevenly and sometimes gives difficulty in locking. The Tucker-McLane forceps are usually satisfactory for these heads. But on the heads with a great amount of moulding these forceps are not satisfactory because they may slip, due to lack of anchorage below the malars. They will also exert too much pressure on the zygoma and parietal boss. These solid blades are good for rotators in the Scanzoni maneuver but usually a fenestrated blade with a deep cephalic curve is better for this extraction. The deep cephalic curve prevents injuries to the vaginal floor and may lessen sulcus tears.

MID FORCEPS: In mid forceps the rules for anterior positions are the same in all stations of the head with emphasis on axis-traction. The DeWees gives the truest axis-traction. When we have a transverse arrest, some operators have developed their skill in the use of manual rotation. I have never been very successful at this procedure. I cannot rotate the head manually without displacing it and the head also refuses to remain anterior until a forceps blade can be applied. Even if the first blade is accurately applied the head may refuse to remain anterior until the second blade is applied and the handles locked.

In a rather roomy pelvis the Pomeroy maneuver may sometimes be used. This, however, is not recommended for those with a good working knowledge of forceps.

For deep transverse arrest or for occiput posterior positions, the Kielland forceps are the ones of choice. They may be applied easily and accurately. They have the sliding lock which permits adjustment on asynclitic heads at any level. In occiput posterior positions the Kielland forceps, which have the semi axis-traction curve if accurately applied, gives us the best results. They are used by a single application without displacing the head and give better results than "Key-in-Lock", Pomeroy, Scanzoni, or manual rotation. In some pelves, the more roomy ones, the delivery may be completed with Kielland forceps; usually it may be done especially since episiotomies are frequently done. In a funnel pelvis it is usually better to remove the Kielland forceps, which have a slight pelvic curve, and apply a fenestrated blade with a more acute cephalic curve. The forceps with the better axis-traction curve is applied after the head has been well rotated and after two or three pulls have been made with the Kielland forceps. This pulling prevents the head from rotating to its original position and also flexes and fixes the head in the proper attitude for axis-traction with a suitable forceps. By substituting a forceps with a better cephalic curve we get better axis-traction, better flexion, and prevent injuries to the posterior vaginal wall and perineum. The proper use of the Kielland forceps also rarely produces any injury to the face or facial paralysis. The bevel, or cushion, on the inside of the blades prevents cuts and bruises. The application by the inversion method prevents brow-mastoid application. Many difficult cases have been made easy by the use of Kielland forceps. In my opinion the danger of using Kielland's is the possibility of rupturing the uterus or bladder, or both. No one should attempt the use of these forceps without a thorough knowledge of them. The dan-

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gers diminish as the knowledge of their use increases.

The use of the Kielland is contraindicated in the following conditions: 1. In a flat pelvis with transverse arrest, having a posterior parietal position; 2. In cases of asynclitic presentations; 3. Parietal positions and in funnel pelves with low symphysis and narrow arch; 4. In all flat pelves.

In all the above cases where the Kielland forceps are contraindicated, we may use the Barton forceps in almost every case, or we could use the Mann forceps, with which I have had no experience.

HIGH FORCEPS: Indication for high forceps is very rare. However, sometimes it is the better procedure of choice to do a high forceps with the Barton than to do a Caesarean section or a version. Sometimes the uterus is so hard and thick after a long labor that there would be a great risk to mother and baby to attempt version. In a flat pelvis, with the head impinged in the superior strait between the symphysis and the sacral promontory, the Barton forceps is outstanding because of its good pelvic curve with the hinged blade and the sliding lock which may be adjusted as the asynclitism is corrected. In face presentations the Kielland forceps are the ones of choice. Here the blades need not be applied in the upside-down method, or inverted method, but are applied directly to the sides of the head. This knowledge will stand us in good stead when the chin is posterior. After application with cephalic curve posterior, the head may be rotated and extracted without re-applying.

BREECH POSITION: The Piper forceps are in a class by themselves for extraction of the after-coming head in breech presentations. They have the dropped handles, springy blades, and axis-traction all combined in one instrument.

SUMMARY

1. In an indication for delivery with forceps there are two essential considerations: An accurate cephalic application, and traction following the pelvic curve.

2. A comparatively new traction curve forceps, the Hawks-Dennen forceps, embodies several desirable combined features suitable to anterior positions.

3. In posterior and transverse positions the Kielland or Barton forceps offer the most advantages.

4. In face presentations with the chin posterior, the Kielland's is the forceps of choice.

5. In breech presentations the Piper forceps, for the after-coming head, offers many advantages.

I desire to acknowledge the assistance and permission of Dr. Edward Dennen of New York for permitting me to draw freely from his article "Choice of Instrument in Delivery with Forceps."

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7th and Anderson Streets.

New Chemical Found Effective for Certain Pustular Skin Diseases.

A new drug has recently been gaining recognition as an effective agent against disease-producing bacteria which invade the skin. This chemical, obtained for the most part from oat hulls, is called Furacin, according to three Boston investigators writing in the February 1 issue of *The Journal of the American Medical Association.*

The investigators—John Godwin Downing, M.D., Millard C. Hanson, M.D., and Marion Lamb—are from the Department of Dermatology and Bacteriology, Boston City Hospital, and the Department of Dermatology, Tufts College Medical School.

Of 212 patients placed under treatment with this chemical, which is applied to the skin, 18 showed a brilliant response and 82 showed good response, while on 45 there was no follow-up.

"The drug shows excellent possibilities in the treatment of superficial infection of the skin, such as impetigo and ecthyma," according to the authors. Both of these conditions are of the same nature in that they are pustular infections of the skin. However, ecthyma is a deeper involvement with ulcerative lesions.

The authors point out that so far there has been no evidence of poisoning from absorption of the drug when it is used in large amounts over long periods. "Although the drug is capable of sensitizing abnormal skins, in our experience to date this tendency is less than that of sulfathiazole or penicillin when used for topical application," they state.

HEMORRHAGE IN PUTRID LUNG ABSCESS*

EDWARD S. RAY, M.D†.,
Richmond, Virginia.

This report is based on a review of putrid lung abscess cases that were admitted to the Medical College of Virginia Hospital from 1940 to 1944 inclusive. All non-putrid abscesses have been excluded and only suppurative lesions of the lung with foul, putrid sputum have been included.

During this five year period, there were 57 cases of putrid lung abscess that had sufficient clinical data for study. Several probable cases were excluded because of insufficient information in the record.

Hemoptysis was noted as being present if the patient expectorated several drams or more of blood. Simple blood streaking of sputum was not classed as an hemoptysis.

In an effort to grade the severity of the hemoptysis it was classed as small if only an occasional expectoration of approximately a dram of blood occurred, moderate if several drams were expectorated fairly frequently, and large if 200 cubic centimeters or more of blood were expectorated in any 24 hour period.

Of the 57 abscess cases there were 25 cases, or 44 per cent, that suffered hemoptysis. Of this number 11 cases suffered a small hemoptysis, 9 cases were moderate, and in 5 cases the hemoptysis was large.

Of these 25 cases of hemoptysis there were 7 deaths from hemorrhage—the patients dying of asphyxia from the overwhelming pulmonary hemorrhage. These 7 cases represent 28 per cent of all cases that suffered hemoptysis and 12 per cent of the entire series of putrid lung abscesses. Two of the 7 deaths from hemorrhage occurred in patients who previously had had surgical drainage of the abscess; an additional 2 cases occurred during bronchoscopy; and the remaining 3 were under medical treatment at the time of death.

Table 1 shows the number of cases in regard to the size of the hemoptysis and the number of fatal hemorrhages in each group. There appears to be some relationship between the number of cases of hemoptysis deaths and the size of previous pulmonary hemorrhages. Three of the deaths occurred among the moderate sized hemoptysis cases for an incidence of 33⅓ per cent, while there were 2 deaths among the cases of large hemoptysis for an incidence of 40 per cent. The correlation is only suggestive, as the number of cases is not sufficiently large for an adequate appraisal.

	57 Abscess Cases	7 Cases of Hemoptysis Deaths
Small	11	2
Moderate	9	3
Large	5	2

Table 1. Relation of size of previous hemoptysis to fatal hemorrhage.

Table 2 reveals the incidence of hemoptysis and hemoptysis deaths in relation to sex and race. As will be noted in this table there is a much greater number of putrid lung abscess cases among the males of both races than among females. This prevalence among the male sex has been the usual experience of those[1,2] who have studied this disease. The incidence of hemoptysis, however, roughly parallels the number of cases of lung abscesses and is between 40 and 50 per cent, except among the colored females where 3 or 4 cases suffered hemoptysis. It will be noted that there were no fatal hemorrhages among the females of either race. The fact that over half of the colored males who suffered hemoptysis died of fatal hemorrhage is interesting and is probably of statistical importance.

	57 Abscess Cases	25 Cases of Hemoptysis	7 Cases of Hemopytsis Deaths
White Male	25	10	2
White Female	7	3	0
Colored Male	21	9	5
Colored Female	4	3	0

Table 2. Relation of race and sex to fatal hemorrhage.

Table 3 reveals the relation of duration of the abscess to fatal hemorrhage. Among the entire series of 57 cases there was approximately an equal

*Read before the Richmond Academy of Medicine, September 24, 1946.

†Department of Medicine, Medical College of Virginia.

number of acute and chronic abscesses at the time of their admission to the hospital. 49.5 per cent were admitted with symptoms of less than six weeks' duration; 50.5 per cent had symptoms longer than six weeks' duration at time of admission. An abscess of six weeks' duration or less is classed as an acute abscess, whereas an abscess of longer duration is classed as chronic. This, of course, is an arbitrary method of classification but is one that is widely accepted.

It will also be seen from *Table 3* that there was no significant relationship between the incidence of hemoptysis and the duration of the abscess, as the number of cases of hemoptysis followed roughly that of the number in each group of the entire series.

The fact that no fatal hemorrhage occurred in abscesses of less than four weeks' duration is probably significant, suggesting that the danger of fatal hemoptysis is less in a really acute lung abscess than in a chronic abscess.

	Total Abscess Cases		25 Cases of Hemoptysis	7 Cases of Hemoptysis Deaths
	Cases	%		
Less than 2 weeks	2		0	0
2 to 4 weeks	8	49.5%	3	0
4 to 6 weeks	18		9	1
6 to 8 weeks	7		6	1
8 to 12 weeks	9	50.5%	3	0
3 to 6 months	5		4	3
6 to 12 months	4		1	0
Over 12 months	4		0	2

Table 3. Relation of duration of the abscess to fatal hemoptysis.

Table 4 indicates the incidence of fatal hemorrhage among the medically treated and among the surgically treated (abscess drainage) cases. All of the cases drained surgically had been treated medically previously and all were abscesses of eight weeks' duration or longer. None of these abscesses were drained during the acute stage. Of the entire series of 57 cases there were 5 fatalities, or 13 per cent, from hemorrhage among the medically treated cases and 2 fatalities, or 11 per cent, among those drained surgically. While the number of cases is too small for definite conclusions to be drawn, the figures suggest that the incidence of fatal pulmonary hemorrhage is not influenced significantly by surgical drainage of abscesses of over four weeks' duration.

Table 4 also reveals the number of fatal hemorrhages among the hemoptysis group in relation to therapy; of the medically treated cases of hemoptysis, 35 per cent died of hemorrhage, while of the surgically treated group 25 per cent died of a similar cause.

There was no apparent relation between the size of the abscess and fatal hemorrhage. In only 2 of the 7 fatal hemoptysis cases was there a large abscess (over 6 cm. in diameter).

There was also no relation between the location of the abscess and fatal hemoptysis, three being located in upper lobes and four in the lower lobes.

	57 Abscess Cases	Fatal Hemoptysis	25 Cases of Hemoptysis	Fatal Hemoptysis
Medical	39	5 (13%)	17	5 (35%)
Surgical	18	2 (11%)	8	2 (25%)

Table 4. Incidence of fatal hemoptysis in relation to therapy.

DISCUSSION

Pulmonary hemorrhage is a frequent manifestation of numerous pulmonary diseases. The most frequent causes of severe hemoptysis are tuberculosis, bronchiectasis (including so-called bronchial erosion), carcinoma and adenoma of the bronchus, and lung abscess.[3] However, it is rare that fatal hemoptysis occurs except in cases of pulmonary tuberculosis and putrid lung abscess.

Most observers have found that approximately 50 per cent of all cases of pulmonary tuberculosis and of all cases of putrid lung abscess suffer hemoptysis at some time during the course of the disease. Jackson and Diamond[4] in 1941 reviewed the cases of hemoptysis at Temple University Hospital over the preceding ten year period and found that there were only three deaths from pulmonary hemorrhage, all of which occurred in patients with lung abscesses. This represented an incidence of 6 per cent of fatal hemorrhage among the lung abscess cases. Since their cases of pulmonary abscess included non-putrid as well as putrid lung abscesses, it is not possible to compare their findings with those reported here. It should be stated, however, that severe hemoptysis is much less frequent in non-putrid lung abscesses than in putrid ones.

Sweet,[5] in an analysis of cases from the Massachusetts General Hospital from 1938 to 1942, stated that massive hemorrhage was one of the important causes of death in cases of lung abscess, although he published no statistical report on the incidence of hemorrhage. He further stated that lobectomy was carried out in two of his cases because of serious hemorrhage.

Minor[6] in 1944 reported the incidence of hemoptysis in 1,000 consecutive cases of pulmonary tuberculosis admitted to Blue Ridge Sanatorium to be 24.3 per cent. Of 36 cases that suffered pulmonary hemorrhage while under observation in the sanatorium, 2 deaths were due to the actual hemoptysis. This certainly represents a much smaller incidence of fatal hemorrhage that that in putrid lung abscess.

Of the 57 cases of putrid lung abscess reviewed in this report, hemoptysis occurred in 25, or 44 per cent, of the cases, and fatal hemorrhage resulted in 7 cases, or in 12 per cent. There was a fatal hemorrhage in 13 per cent of the medically treated cases and in 11 per cent of those drained surgically. These findings indicate that neither of these types of therapy is effective in preventing serious pulmonary hemorrhage. For that reason it is believed that lobectomy is the treatment of choice in cases of putrid lung abscess when hemoptysis is a prominent feature. The incidence of fatal hemorrhage of over 50 per cent among the colored males who suffered hemoptysis suggests that lobectomy should be considered an imperative surgical procedure in these cases.

The fact that all cases of fatal hemorrhage occurred in patients with symptoms of lung abscess of four weeks' duration or longer indicates the importance of early and effective therapy of acute putrid lung abscess. Despite the recent reports[7,8] of encouraging results in the treatment of such abscesses with penicillin, it is doubtful if such therapy in a large series of cases will equal the results of Neuhof[9] in the surgical drainage of putrid abscesses in the acute stage.

It is very likely that massive hemoptysis in putrid lung abscess is a manifestation of the chronic stage of the disease, and, as such, indicates that the optimum chance of cure of the abscess has passed.

Because of the disappointing results in the medical treatment and in the surgical drainage of chronic lung abscesses, there have been an increasing number of lobectomies[10] performed for this condition in the past few years. And with improvement in surgical technique and with the progress in chemotherapy one can expect an increasing number of lobectomies carried out for this condition. It is likely that lobectomy will rapidly become the procedure of choice in cases of chronic lung abscess.

SUMMARY

1. Fifty-seven cases of putrid lung abscess are reviewed in regard to incidence and severity of hemoptysis.
2. An hemoptysis incidence of 44 per cent was found with seven deaths from hemorrhage.
3. All fatal hemorrhages occurred in cases with symptoms of abscess of four weeks' duration or longer, suggesting that massive hemorrhage is a manifestation of chronic lung abscess.
4. The incidence of fatal hemoptysis was not influenced by surgical drainage of abscesses of over four weeks' duration.
5. There was no relationship between massive hemoptysis and size or location of the abscess.
6. Lobectomy is felt to be the therapy of choice in lung abscess of over four weeks' duration with hemoptysis.

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THE FORUM

Premature Quadruplets.

Mrs. Charles Henn, Jr., age 26, a British war bride, made her first office visit September 3, 1946. Her last menstrual period was May 2, 1946. Expected date of delivery was February 9, 1947. Usual weight 135 pounds.

PAST HISTORY:

This was essentially negative. She has a child 1½ years old. An appendectomy was performed July 20, 1946, and a gangrenous appendix was removed through a MacBurney's incision. Alas, the ovaries were not viewed. There was no history of multiple pregnancies on either side of the present family.

Mrs. Henn ran a normal prenatal course until her visit November 11, 1946. She had gained 12 pounds since the previous visit. Blood pressure had risen to 145/90. Urine showed a trace of albumen. Present weight 168 pounds. The height of the fundus suggested the time of delivery to be two months ahead of the calendar date. Two fetal hearts were heard, and x-ray examinations revealed a quadruple pregnancy.

The patient entered the hospital immediately and under 6 days of the usual drastic treatment for toxemia, her condition was considered normal. Weight 156 pounds. B.P. 122/70. Urine negative. The next month showed no change in her condition. Treatment during this time consisted of careful watching, plenty of rest, books and tea. A simple low caloric diet was allowed. On December 23, the patient complained of mild indigestion for seventeen hours, accompanied by funny irregular abdominal cramps. During this time the cervix slowly dilated by an amniotic sac. At no time could we feel a presenting part. At 6:30 P. M., a bag of water presented through the vagina. This was ruptured and the babies were born in the following order:

A. Male at 6:45 P. M. L.O.A. This placenta delivered at 6:50 P.M.

B. The second sac was ruptured. Male at 7:04 P.M. L.O.A.

C. The third sac was ruptured. Male at 7:34 P.M. R.S.A.

D. The fourth sac was ruptured. Female at 7:40 P.M. R.O.A.

The three cords and thrice fused placenta were delivered at 7:45 P.M. Apparently the quadruplets are fraternal. All babies cried lustily when born. Due to the rapidity of events no anesthesia was used.

The birth weights were as follows:

Baby A—2 pounds 12 ounces
Baby B—3 pounds 10 ounces
Baby C—4 pounds
Baby D—3 pounds 5 ounces

The mother's course in the hospital was uneventful and she was discharged in 16 days as well.

The babies were placed in incubators and treated very much the same as any premature infant. Six weeks after delivery they weigh 6 pounds or over and are ready to leave the hospital.

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NOTE. Summary of paper to appear in the *Journal of Obstetrics.*

The Ollier-Thiersch Graft.

Surgeons quite generally consider the Ollier-Thiersch graft, a thin graft. Recently the *British Medical Journal*[1] has reprinted translations of the original articles[2] of both of these men and from these it is obvious that those men advocated what we now know as a split skin graft, and which at that time was cut with a razor and included much or all of the entire skin. This idea that an Ollier-Thiersch graft is a thin graft has found its way into the text books[3] to such an extent that it is doubtful if it can be changed. One book bravely stands up for the original meaning, namely, Maxwell Maltz's Evolution of Plastic Surgery, page 259. Possibly one way to resolve this difficulty would be to discontinue using the term Ollier-Thiersch graft.

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E. C. L. MILLER.

Dr. John Peter Mettauer.

Old "Doctor High Hat" some have affectionately called him,
The tall country doctor, made taller still by his ever-present black beaver.
He stood tall, not in inches alone, (and there were many of them)
But in his profession, for he was a good doctor.
He was really a surgeon, but back when he lived,
In the 1800's, you were just—doctor—
No matter what you did.
Yet, Dr. Mettauer was a surgeon, and what a surgeon!
It was he who first used metal sutures for operations,
While others had always used silk.
And he was the first to successfully perform the—
Vesico-vaginal fistula operation,
But we don't have to worry about that now
'Cause it's gone out of style.
Perhaps in his day, folks thought he was a miracle man,
For he healed the cleft palate, and helped the cataract-blinded to see.
You say—That happens every day now!
True—it does.
But when Dr. Mettauer made it happen,
He did it with home-made instruments, and he didn't have
Trained nurses, laboratories, electricity, hospitals . . .
In fact, he didn't have much of anything
But a brilliant mind
And two wonderful hands—
And that's all he needed.
Peter Mettauer was an unselfish man, sharing what he had.
One of the finest things he ever shared was his brilliant mind,
And of that he gave generously.
He established the fourth medical school in the South.
There was quite a curriculum in that school,
The Prince Edward Medical Institute.
Students there studied medicine, surgery, clinical medicine,
Clinical surgery, obstetrics and pathology, materia medica
And therapeutics, and medical jurisprudence.
Prince Edward Medical Institute had quite a faculty too—
Dr. John Peter Mettauer.
Yes, single-handed he taught the student body for ten years,
Until two of his sons joined him, for they had become doctors too.
Oh, Dr. Mettauer had many chidren—13 by count.
And wives? Chivalry was not dead, for he captivated four . . .
Did it all without a lawyer's help, too.
And all those wives, and all those children
Didn't cut his days short a mite, for he lived all the time from
Seventeen hundred and eighty-seven to eighteen hundred and seventy-five,
Eighty-eight full and fruitful years.
Today his spirit roves that country he loved so well,
Prince Edward County, Virginia. And at night,
It comes back to rest in the Hampden-Sydney College Cemetery
Under a tremendous marble monument.
I guess he tips his tall black hat as he floats by,
For he sort-of likes those words carved on it:
"Erected by the Medical Society of Virginia."
Most any night just before daybreak,
Dr. Mettauer holds a medical conference,
For on his right is his son, Dr. Henry Archer Mettauer,
And on his left his father—the fine old gentleman who came to America
With Lafayette—Dr. Francis Joseph Mettauer.
But there isn't a Dr. Mettauer left in America—
John Peter's three doctor sons said their daddy married enough for all of them,
And each died a bachelor.
We hear that the family still exists in Alsace, France,
For the old family servant told us so.
He says over there they are dukes and duchesses—lords and ladies,
He says they're great folks—His Mettauers.

MARTHA TURNAGE,
Radio Consultant to Department of Public Relations, Medical Society of Virginia.

Prize Contest.

The American Association of Obstetricians, Gynecologists and Abdominal Surgeons announces a foundation prize contest.

For further information, write Dr. James R. Bloss, secretary, 418 Eleventh Street, Huntington 1, West Virginia.

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MEDICAL SOCIETY OF VIRGINIA

THE COUNCIL
January 16, 1947

The Council of the Medical Society of Virginia met at the Society's office in Richmond on January 16th and was called to order by the President, Dr. William L. Powell of Roanoke. Others present were: Drs. Guy Fisher, President-Elect; Julian L. Rawls, immediate past President; A. Brownley Hodges, first Vice-President; R. B. Bowles, C. L. Harrell, Carrington Williams, J. L. Hamner, W. A. Porter, W. R. Whitman, and A. F. Robertson, Councillors from the first to seventh districts; and Dr. M. P. Rucker, Editor of the *Monthly*.

Minutes of the October meeting of the Council were ordered accepted as printed in the December 1946 *Monthly*.

Business brought forward from the last meeting was next discussed. At that time it was moved that the Committee on Scientific Exhibits secure estimates on some much needed equipment for better displays of the exhibits, with the idea that the Council might at this time make an appropriation for securing the material. Dr. Vincent Archer, a member of the Committee who had been asked to secure estimates, advised that he had not been able to secure definite information to this time but was in communication with several people with regard to it. In view of this, the Council moved that whatever may be needed for securing view boxes for X-ray films up to $1,000.00 be appropriated. Adopted.

A resolution from the Virginia Society for Pathology and Laboratory Medicine and a letter from the American Society of Clinical Pathologists had been referred to the Committee on Ethics, with request that they submit their findings at this meeting. This referred to a letter to physicians practicing in the Medical College of Virginia Hospital with regard to laboratory work on private patients and the offer of "concessions" or "rebates" to physicians referring such work. Dr. Hamner, chairman of the Ethics Committee, stated that he had talked with Mr. Hudgens, director of the Hospital, and he felt the whole matter could be ironed out between the College Laboratory and the State Pathological Society. For this reason, the Committee had no recommendation to make at this time but would make a final report later.

Dr. Powell spoke of the Veterans Fee Scale which had been discussed previously and stated the Committee had its last meeting on January 7th and went over fees. The Veterans Administration now has the fees under consideration for the second time. A matter discussed at that meeting was how to determine which doctors are specialists in cases where veterans have to be referred to specialists in various lines. He felt the local societies would have to pass on this, though he does not think this is necessary until a definite agreement has been completed with the Veterans Administration. It was thought by some that a committee might be appointed in each local society to designate the various specialists.

Dr. Williams was asked about the Veterans Loan Fund which had been placed in charge of a committee composed of him as chairman, with Dr. J. R. Gorman and Dr. A. F. Robertson as other members. Dr. Williams reported that he thought they would have an applicant this winter, but the boy had made other arrangements so they have no prospect at this time.

Dr. Powell spoke of the urgency of having an appointment to the State Board of Medical Examiners for the 6th District to fill the vacancy caused by the death of Dr. J. W. Preston. He and Dr. Whitman, councilor, had communicated with the counties in that district and had secured the three nominations required to be sent to the Governor. They are Dr. J. J. Giesen of Radford, Dr. K. D. Graves of Roanoke, and Dr. Ernest G. Scott of Lynchburg. Although some of those nominated at the State meeting for the 7th, 8th and 9th Districts had indicated they would be unable to serve, it was decided to submit those names together with nominations for the 6th District to the Governor, as the law requires that three names be sent the Governor from each district, from which he may make a choice. The Governor will be advised as to which of the nominees definitely will be unable to accept. The Council at this time approved the nominations from the 6th District.

The question was next presented of an appropriation to the Woman's Auxiliary of the State Society for expenses at their annual meeting and it was moved and adopted that they be given $100.00 or as much thereof as needed for their expenses at that time. It was stated this could be taken care of from money received for commercial exhibits.

With regard to a joint meeting with the West Virginia State Medical Association, Dr. Powell said he had talked with Mr. Hyde, manager of Hotel Roanoke, who had taken up this matter with the Hotel Association of Roanoke. They reported on the rooms available at their various hotels, which they said would be ample for the Medical Society of Virginia but felt many doctors would be forced to accept uncomfortable accommodations for a larger attendance. It was decided that a joint meeting would not be feasible in Roanoke, and motion was offered by Dr. Porter, seconded by Dr. Harrell, that the President express the regret of the Society that the joint meeting cannot be arranged at this time as accommodations are not available. Carried.

Dr. Powell said he had communicated with the members of the Council, stating the dates available at Hotel Roanoke for the State meeting, and they had been set as October 13, 14, and 15, in accordance with the majority vote.

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The secretary brought up the question as to the 1947 meeting being the Centennial meeting of the Society. Though there have been several gaps in years of meeting, this will be the 100th time of meeting since organization of the Society in December 1820. Dr. Rucker, being asked if he felt the Society would be justified in calling this its Centennial meeting, stated that in view of the investigation he and the secretary had made several years ago, he felt this should be the centennial meeting. Dr. Fisher felt something special should be arranged for the meeting and Dr. Williams moved that Dr. Rucker and Dr. Wyndham Blanton, as outstanding historians of the Society, be appointed a committee to arrange for such a program, with Dr. Blanton as chairman. This was seconded and carried.

Dr. Powell had a report from the meeting of the Public Relations Committee held January 7th. This brought out the urgent need of having active District Councils, and it was requested that each Councilor see that such a Council is appointed in his district and send names to Miss Edwards The secretary said there had been District Councils appointed several years ago but their work had been principally with the Legislative Committee. Dr. Hamner said he had used his Council all during the war and could not have accomplished what he did in his district but for it. Dr. Powell stated that, although the report from the Public Relations Committee is not yet ready for publication, he would ask the secretary to read it that the Councilors may be informed as to what is being proposed. After the presentation it was asked if the Council should vote on this. Dr. Powell replied that the Committee has power to act but the report was brought to the Council for suggestions.

Dr. Bowles asked if it might be well for the Public Relations Committee to issue a bulletin once a month to keep members advised as to what is going on. Dr. Robertson felt that such a report might be included in the *Monthly* rather than as a special bulletin, if agreeable to Dr. Rucker, who said he would be glad to publish the reports. Dr. Robertson also suggested that Mr. Johnson notify the Councilors when he expects to visit the county societies so they may be present.

At this time, Dr. Powell appointed a Budget Committee composed of Dr. Williams, Chairman, and Drs. Whitman and Harrell, advising them that they should prepare and present a budget for the annual meeting of the Council. They might arrange to discuss this on the Sunday evening prior to the meeting.

Dr. Powell said the Society has two delegates to the American Medical Association for whom the Society has been paying actual railroad and Pullman fares. These men attend the meetings and work hard and he felt some additional part of their expenses should be covered. It was suggested that the delegates be allowed a per diem while attending the A.M.A. meetings. Following discussion, a motion was made and seconded that the Council appropriate sufficient funds for the delegates attending the meeting in June to meet their expenses, up to $10.00 a day, including travel time, in addition to the transportation. This was adopted.

The secretary said Dr. Hutcheson had advised that he and Dr. Mulholland had not yet completed their report of the December meeting of the House of Delegates, and she was instructed to publish it in the *Monthly* as soon as possible after its receipt.

As the next meeting of the American Medical Association is to be an unusual event and will meet nearby, Dr. Powell suggested that the Council might authorize the secretary and assistant secretary to attend. This was approved by the Council.

The secretary presented the following letter received from the last secretary-treasurer of the Piedmont Medical Society:

"At the last meeting on June 6, 1946, of the Piedmont and Albemarle County Medical Societies, the question arose as to the advisability of continuing the Piedmont Medical Society.

"It was brought out that the Piedmont Society was started some years back when there were no county societies in the adjoining counties.

"Today, most of these counties have their own societies. The majority voted that the purpose of the Piedmont Society no longer existed.

"Inclosed is my check for $20.84, balance in treasury. Under separate cover I am mailing you the book of minutes and other papers.

"I was advised that these should be mailed to you, as property of the state societv.

Yours very truly,
E. D. DAVIS, JR., *Sec.-Treas.*"

To this, she had replied:

"Naturally, I would not wish to turn down a gift to the Society, if that was the intention of your members, but there was no reference made to it in your last minutes. As your membership was largely composed of the Albemarle County Medical Society, we are wondering if the check should have been sent to them instead of the State Society. We are holding the check and would appreciate your discussing this with some of the members and letting us know your wishes in the matter."

Not having heard further from Dr. Davis, she asked for instructions. It was moved and carried that the Society file the minutes and accept the check with thanks.

Dr. Powell next presented the following letter from Dr. E. P. Lehman:

October 17, 1946.

DEAR DR. POWELL:

I am putting in writing the matter I discussed with you on Monday in regard to the method of nominating Councilors for election by the Society with the suggestion that it be referred to the Judicial Committee for consideration of incorporation in the by laws of the Society. I am sending a copy of this letter to Dr. Fisher and to Miss Edwards.

When the President of the Societv announces that the delegates of the districts which are to elect new Councilors shall hold a meeting and agree on a nomination, and when he then calls a recess for this purpose, a great deal of confusion immediately supervenes. I have been a delegate on a number of occasions and have always been cognizant of the inefficiency of the method, and I am not alone in this conclusion In the first place, no set place is assigned as a rendezvous for the delegates from each district, the result of which is that there is much calling

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back and forth across the hall in attempts to collect them. There is no assurance that all delegates present from the districts are brought together. In the second place, there is no possible way for those who are brought together to know whether or not all present are duly constituted delegates. In the third place, it is quite possible that a Councilor who is up for reelection may be a delegate and vote, a situation which is obviously improper.

The election of a Councilor is an extremely important matter in the life of the Medical Society of Virginia, and I feel strongly that it should be formalized and regulated so that it can proceed efficiently and with the very least political pressure. I would like to suggest, therefore, the following procedure:

(1) That the secretary furnish to the president at the first meeting of the House of Delegates a list of all delegates and alternates from each component society. Any substitute delegate not on this list should make his credentials known to the secretary before the meeting and the necessary substitute be placed on the list given the president.

(2) From this list the president will appoint a secretary from each district to whom he will furnish the amended list of delegates from his district. The duties of the secretary will be (a) to check the delegates present against the list and thereby assure himself that no votes are cast without proper authority; (b) to preside at the opening of the district meeting and to call for the election of a chairman who will take over the meeting; (c) to report the results of nomination at the succeeding meeting of the House of Delegates.

(3) At the time of recess the president shall designate a corner of the hall in which each of the districts shall hold its meeting. It would not be undesirable for him to read the list of accredited delegates who would meet at the designated point.

(4) A definite provision should be made in the by laws that no Councilor who is up for reelection shall act as delegate even though elected by his component society, and that he shall be forbidden to attend the meeting of his district.

I believe that the evils now resulting from the present methods could be abolished by some such mechanism, and I sincerely hope that the Society will agree.

Looking forward to your regime as president and with kindest personal regards, I am

Sincerely yours,
EDWIN P LEHMAN, M. D.

It was moved and carried that this letter be referred to the Judiciary Committee, after which recess was taken for lunch. Resuming business, Dr. Powell introduced Dr A. L. Carson, Jr., who represented the State Health Department in the absence of Dr. L. J. Roper, who was sick.

Dr. Carson stated that the Health Department had received a request from the Governor to do something about the health of school children, and the plan proposed by the Health Department had the endorsement of the State Department of Education. This would be in line with that in regard to prenatal and preschool clinics. With the approval of this Council, they wish to use a cross section of the State to hold diagnostic clinics for school children with a view to expanding the work if it seems desirable. Conditional funds have been released for this purpose, but no money had been given for correction of defects.

Dr. Robertson expressed appreciation of the way the Health Department bring such matters to the doctors and expressed approval of their plan. Dr. Harrell asked what would be done about correcting defects, to which Dr. Carson replied they would do everything possible to refer the children to their family physicians, and would do the best they could in regard to indigent cases. They hope to be in position to show the next General Assembly what is done or can be done. The counties of Loudoun, Hanover, Elizabeth City, Mecklenburg, and Smyth have been selected for this work. The Council expressed its appreciation and approval of the plan presented.

The secretary said she had received inquiries from several members as to how to interpret the number of years of license in deciding amount to be paid for dues. It was stated that this should not be determined by time doctors were granted certificates from the State Board of Medical Examiners, but by the time they first registered these certificates with the county or city for the practice of medicine, as it was stated that many young doctors did not register for practice at once, due to internship, recent service with the armed forces, etc. The By-Laws provide for exemption from dues for members over seventy years of age, upon their request. In the case of members under seventy, where the payment of dues seems to work a hardship, the secretary was instructed to ask for a ruling from the respective councilors.

At this time, Dr. Powell called attention to the question of Fellowship in the American Medical Association as this was not plain to many He stated that upon enrollment of a member in his State Society, he automatically became a member of the A. M.. A., but if he wished Fellowship, he had to send a special request for it, but it cost no more than subscription to the Journal of the Association. He suggested that doctors should check to see their status with the A. M. A.

Dr. Rawls, chairman of the Department of Clinical and Medical Education, said at their recent meeting, Dr. Cooper, chairman of the Cancer Committee, suggested that the Department put on post-graduate work on the subject of cancer if the money and time were available. They had discussed the feasibility of three or four day courses in Charlottesville and Richmond at the medical schools, but were fearful that doctors would not take that much time from their work for one subject. In place of that, he had written to Isle of Wight, Nansemond and Southampton Counties to see if they would be interested in holding an all-day clinic in Suffolk for both white and Negro physicians. Dr E. C. Joyner, president of the Nansemond County Medical Society, felt this could be arranged in Suffolk, and the first clinic is in the making. The next place which had been suggested was perhaps Warsaw or Tappahannock for the Northern Neck area. If the response is good in these two, an effort will be made to spread out. It is planned to have these as didactic courses but they would be glad to have clinics if they can pick up some cases. This was stated for the information of the Council and the members thought the plan excellent.

In view of the fact that the 1947 meeting is to be

the Society's centennial meeting, Dr. Rucker asked what character of program the Society would wish. Dr. Hamner suggested giving over part of the program to general practice but not to have it at the end as several members had told him they were unable to stay for last year's section on general practice. The question was also asked as to having two sections. Dr. Rawls said that frequently medical men wish to hear the surgical discussions and *vice versa*. Dr. Porter asked if there were any way speakers could be taught to use the loud speakers as frequently part of the talks could not be heard. It was thought that lapel loud speakers might remedy this trouble. The question was also asked about having discussions of all papers in one session at lunch but it was thought impracticable to try this as the membership is frequently scattered at lunch time.

Adjournment folowed.

AGNES V. EDWARDS,
Secretary.

Approved:
W. L POWELL,
President.

January 25, 1947.

MEDICAL SOCIETY OF VIRGINIA
PUBLIC RELATIONS

Medical Society Launches Public Relations Program.

A well-rounded, five-point public relations program for the Medical Society of Virginia is being set in motion as the result of a highly constructive conference sponsored by the Public Relations Committee at the Hotel John Marshall in Richmond on Thursday, December 19, 1946.

Participating in the conference, at which public relations objectives and desirable methods of attaining them were thoroughly discussed, were members of the Council of the Medical Society of Virginia, representatives of local medical societies and the Woman's Auxiliary of the State organization, as well as consultants on the press and radio.

With Mr. Henry S. Johnson, the Medical Society of Virginia's Public Relations Director, presiding, the conference covered a prepared agenda, salient features of which were discussed in detail by guest consultants. The entire conference followed the general pattern outlined by the Ten-Point Program of the American Medical Association and centered more specifically upon the Five-Point Program of the Medical Society of Virginia. The Five-Point Program was adopted in May, 1946, by the Council of the Medical Society of Virginia and first carried in the *Virginia Medical Monthly* of last July.

Taking part in the program were Mr. Thomas A. Hendricks, Public Relations Representative of the American Medical Association, and Mr. Hugh Brenneman, Director of Public Relations for the Michigan State Medical Society. Consultants addressing the gathering included Mr. Walter Bishop, Public Relations Director, and Mr. Barron Howard, Business Manager, both of Radio Station WRVA; Mrs. Martha Turnage, Radio Script Specialist, formerly with WRVA; and Mr. M. W. Armistead, III, Executive Secretary and Public Relations Adviser to the Governor of Virginia, who discussed the role of the press.

Mr. Dowell Howard, Assistant State Superintendent of Public Instruction, discussed the relationship between public education and the medical profession and ways in which they might cooperate in an educational program.

An outline of the progress and plans for extension of prepayment hospital and medical service was given by Dr. William R. Pretlow of Warrenton, President of the Virginia Hospital Service Association; Mr. M. Haskins Coleman, Jr., of Richmond, Executive Secretary of the Blue Cross; and Mr. A. Fred Noyes of Richmond, Enrollment Manager of Blue Cross and Blue Shield.

An active part in the conference was taken by Dr. W. L. Powell of Roanoke, President of the Medical Society of Virginia; Dr. M. Pierce Rucker of Richmond, Editor of the *Virginia Medical Monthly;* and Miss Agnes V. Edwards, Executive Secretary of the Medical Society of Virginia.

Approximately sixty-five physicians, representing a large percentage of the local medical societies, attended the conference, many of whom expressed the view that this type of conference, as a means of advancing a proper and progressive public relations program, should be held annually and some even advocated such meetings semi-annually.

A positive approach to public relations objectives was emphasized at the all-day session, at which major points of the program were explained by consultants and discussed by those attending. A marked degree of enthusiasm for a concrete, intelligent and aggressive but dignified program was evidenced among the conferees.

Among the objectives of the program discussed on the conference agenda were:

(1) The advantages of the present system of personalized private medical practice.

(2) The disadvantages and inherent dangers involved in plans for government-controlled or dominated plans of "socialized" medical practice.

(3) Efforts and plans developed by the medical profession to extend medical care to persons not now receiving adequate medical attention.

(4) Problems confronting the medical profession, such as shortages of doctors, nurses, hospitals, clinics, etc., and likely avenues of approach to the solution of these problems.

(5) Developments in medical science.

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(6) The importance of prepayment medical care plans.

The necessity for personal contacts was emphasized. In implementing and making effective a public relations program, it was stressed these personal contacts must be pursued not only by the Society's Public Relations Director but by individual physicians and selected lay leaders possessing an understanding of the objectives and problems of the medical profession. The value of the activities of local medical societies in advancing a public relation program was also underlined, and contacts with members of local, state and federal legislative bodies, both by individuals and groups of the medical profession, were represented as being of vital importance.

It was suggested to the conference that these media be used for disseminating information:

(1) Civic, fraternal, cultural and church groups, etc., through addresses, conferences, discussions, question-and-answer programs, and so forth, led by individual physicians, representatives of state and local medical societies, and outstanding visiting members of the medical profession.

(2) The press, including daily and weekly newspapers, as well as periodicals such as trade and cultural publications.

(3) The radio, through news releases and a variety of programs designed to disseminate information in a manner attractive to the listener.

(4) Educational forces.

(5) Motion pictures.

The day's agenda was summarized at the end of the program by Dr. Walter B. Martin of Norfolk, Virginia's representative on the Council of Medical Service and Public Relations of the American Medical Association and by Dr. J. M. Emmett of Clifton Forge, Chairman of the Public Relations Committee of the Medical Society of Virginia.

Various suggestions were made at the conference as to the vital part to be played in the public relations program by members of the Council, District Councils, local medical societies, and the Public Relations Director, and plans are now being put into operation to organize the program thoroughly on a state-wide, coordinated scale.

Follow-up meetings on the local level, with the Public Relations Director in attendance, probably will be the sequel to the state conference. This course was advocated by numerous persons attending the meeting.

The conferees enjoyed a luncheon in the Marshall Room, at which informal discussions continued.

Public Relations Organization.

Our Public Relations Program with the Medical Society of Virginia has been under discussion for several months. In addition to meeting with component societies desiring to discuss this, and our state-wide Public Relations Conference, December 19, the Public Relations Committee has been diligent in approaching the matter of organizing and inaugurating a Public Relations Program.

Members of the Council of the Medical Society of Virginia have, in many instances, already sent in a list of members of their respective District Councils. These, in some cases, may need some up-to-date revisions. The Director of Public Relations is working with the Council on this particular item as a very essential one, and it is hoped that in the near future this may be complete.

One need not even suggest the importance of an organization if a program is to be properly administered and carried out. The members of the Public Relations Committee, the Councilors, and the Office of Public Relations need and earnestly solicit your cooperation with all concerned in order that we may go forward with our "Five-Point Program" as soon as possible.

If this is to be done, one of the most fundamental things, of course, would be the adherence to Section 7 of Article 8 of the By-Laws of the Medical Society of Virginia, which is as follows:

"Each Councilor District shall have a District Council composed of members from each county, the State Councilor of that district to act as chairman. The purpose of these District Councils is to bring the individual physician of the county in closer contact with the Society and its needs."

It is earnestly hoped that we shall, very soon, have a complete list of those referred to in this section of the By-Laws and that these members of the District Council may serve their respective medical societies and counties as a member of the District Council and Public Relations Representative.

If our program is to be properly organized and attains the objectives we hope, it is essential that we shall have at least one doctor in every medical society and at least one doctor in every county in the state who will understand what we are trying to do and who will help us in the accomplishment of this.

A.M.A.'s President Visits Virginia.

Dr. H. H. Shoulders of Nashville, Tennessee, President of the American Medical Association, was a recent visitor in Virginia. His host—the Peninsula Academy of Medicine. The Academy, consisting of doctors from Elizabeth City County, Hampton, Phoebus, Newport News and Warwick, brought Dr. Shoulders to Newport News as the third speaker on the forum provided by the Institute of Public Affairs and arranged by the Junior Chamber of Commerce of Newport News. Dr. Robert H. Wright, Jr., of Hampton, is President of the Academy.

A.M.A.'s president was entertained at a dinner at the James River Country Club by the Academy, their

wives, and many others of the Hampton Roads area and was also the guest of honor at a reception following the lecture on "Socialized Medicine" which was delivered before a capacity crowd at the high school auditorium at Newport News.

The following day he was escorted through the Mariners Museum at Hilton Village by Mrs. Waverly Payne of Newport News, and accompanied on a tour of Colonial Williamsburg by Henry S. Johnson, Director of Public Relations, Medical Society of Virginia.

The photographs were provided by Mr. Gerald H. Bath, Director of Public Relations of Colonial Williamsburg, as one of their many courtesies of the day.

Dr. Shoulders is pictured in the Library of the Colonial Governor's Palace.

Public Relations and Local Medical Societies.

The Public Relations Committee of the Medical Society of Virginia in recommending a Public Relations Program, believes that the local medical societies should know that the Director of Pubic Relations would be glad to visit with them whenever possible to discuss the program.

In July, 1946, a letter to this effect was sent to all the Component Medical Societies and on January 17, 1947, a follow-up letter was sent to those societies that had not been heard from.

The Director of Public Relations has already met with approximately twenty-five Component Medical Societies, four District Medical Societies, and with a number of hospital staffs. He has talked with doctors representing approximately seventy-five counties and cities in the state.

Dr. H. H. Shoulders, President of the American Medical Association, at the beginning of his tour by way of Colonial transportation, Williamsburg.

Any medical society desiring to have a discussion of Public Relations is requested to communicate directly with Mr. Henry S. Johnson, Director of Public Relations, at 1200 East Clay Street, Richmond 19, Virginia. He is also available, if possible, for any meetings on which you wish to schedule him with lay groups.

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PUBLIC HEALTH

L. J. ROPER, M.D.,
State Health Commissioner of Virginia

The report of the Bureau of Communicable Diseases of the State Department of Health for January 1947, as compared with the same month in 1946, follows:

	January 1947	January 1946
Typhoid and Paratyphoid	3	7
Diarrhea and Dysentery	151	105
Measles	496	540
Scarlet Fever	163	266
Diphtheria	37	63
Poliomyelitis	4	1
Meningitis	10	36
Undulant Fever	0	2
Rocky Mountain Spotted Fever	0	0
Tularemia	16	17

ROCKY MOUNTAIN SPOTTED FEVER
PREVALENCE AND MORTALITY IN VIRGINIA WITH SPECIAL EMPHASIS UPON PREVENTION

During 1946 there were reported in Virginia 92 cases with 14 deaths from Rocky Mountain Spotted Fever. This represents a slight decrease in cases over the previous year, in which 99 cases were recorded. Improvement is noticeable in mortality since 21 deaths occurred in the 1945 group of cases. The totals for the seven-year period 1940-1946 reveal cumulative figures of 454 cases and 91 deaths, a case fatality of 20.0 per 100 cases. The number of cases distributed through the nation during 1946 is not yet available, but in each of the two preceding years the case load in Virginia far exceeded that of any other State. Since 1939 the disease has appeared in 83 of the 100 Virginia counties, with sporadic concentration varying from year to year in certain areas.

While this situation is not too alarming, the increasing prevalence with an attending 20 per cent mortality rate demands attention. As is now well known, Rocky Mountain Spotted Fever is transmitted to man in the Eastern United States through the bite of an infected wood tick. It is, however, recognized also that comparatively few tick bites are followed by disease, and that apparently a margin of safety of several hours exists after attachment of the tick before the bitten area is infected. Eradication of these insect vectors remains impossible at present and control efforts must be diverted toward individual protection. It, therefore, appears necessary to outline the general and specific modes of prevention.

I. GENERAL MEASURES OF CONTROL

1. Avoid infected areas during the tick season (April through September).
2. Destroy weeds, tall grasses and low shrubbery adjacent to frequently traveled pathways.
3. When occupation necessitates frequent contact with tick infested areas
   a. Wear smooth, sturdy clothing fitted tightly about ankles, wrists and neck. High leather or rubber shoes are desirable.
   b. Examine body carefully at least once daily for ticks, paying particular attention to warm, moist and hairy body areas.
   c. If ticks are found they should be carefully removed. Hands should be protected and the tick withdrawn by grasping its head firmly with thumb forceps. In instances where the tick head is deeply imbedded it may become necessary to dissect the head out. It is recommended that the bitten area be immediately cauterized, using fuming nitric acid, strong carbolic or tincture of iodine. This may generally be safely accomplished by surrounding the bite with petroleum jelly and applying the cauterizing agents through a sharply pointed cotton tipped applicator.

II. SPECIFIC MEASURES OF CONTROL

1. Two types of Rocky Mountain Spotted Fever vaccine are available and both offer high levels of protection. One of these, the tick-tissue vaccine, is used where there is evidence of allergy to egg protein. Chick-embryo vaccine is used more commonly, but must never be used when sensitivity to egg protein is suspected or known. These vac-

cines are made available for free distribution to all Virginia physicians through the State and local health departments, and are intended for those constantly exposed to tick infestation—those who live or work in areas where Rocky Mountain Spotted Fever has occurred or is occurring.

2. Vaccine should be refrigerated but not frozen, and never given after expiration date on the biological.
3. Those requiring protection should receive vaccine in the late winter or early spring, well in advance of the tick season.
4. Protection is conferred for only one tick season and should be repeated each year.
5. Three injections given subcutaneously of chick-embryo or tick tissue vaccine are recommended at 7-10 day intervals.
6. The following dosage schedule is recommended:
   a. Ten years and over—3 doses of 1 cc. each.
   b. Five to ten years—3 doses of 0.5 cc. each.
   c. Under five years—2 doses of 0.5 cc. each, 10 days apart.
7. Vaccination after tick bite occurs is not recommended.
8. Local reactions may occur and occasionally general reaction lasting to 4-8 hours. Both vaccines contain protein, and anaphylactic reactions may occur with individuals allergic to egg or to tick tissue.

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

President—MRS. J. E. HAMNER, Petersburg
President-Elect—MRS. J. L. DECORMIS, Accomac
Recording Secretary—MRS. M. H. HARRIS, West Point
Corresponding Secretary,
MRS. MEADE EDMUNDS, Petersburg
Treasurer—MRS. REUBEN SIMMS, Richmond
Editorial Chairman—MRS. E. HOLLAND TROWER, Eastville

Jane Todd Crawford Memorial Fund.

After many years of planning and investigation, the Woman's Auxiliary to the Southern Medical Association has established a definite and most suitable memorial to Jane Todd Crawford. The following resolution has been passed:

"That the Jane Todd Crawford Memorial Fund be used as a loan to help medical students or physicians from the south desiring to do post-graduate work in gynecology, the said students or physicians to be recommended by the dean of the medical school of which they are in attendance, or by the local medical society of which they are a member and approved by a committee of three elected by the Executive Board of the Woman's Auxiliary to the Southern Medical Association."

The name of Jane Todd Crawford is not a new one but one that has long been associated with the early development of abdominal surgery and the beginning of an entirely new era in the practice of medicine.

Jane Todd was born in Rockbridge County, Virginia, in 1763, later in life marrying Thomas Crawford and moving to Kentucky. It was in Green County, Kentucky, that Dr. Ephraim McDowell, coincidentally born in Rockbridge County, Virginia, in 1771, and also removed to Kentucky, was called to diagnose her case. The local physician believed her condition due to pregnancy but Dr. McDowell made the correct diagnosis—a large ovarian tumor.

Dr. McDowell explained to Jane Todd Crawford the necessity of removing the mass not only to give her relief but also to prolong her life. He stated plainly that the operation would be an experiment which had never before been successfully performed but one on which he was willing to stake his reputation if she were willing to bare her flesh to the knife. This courageous woman readily agreed to submit to the experiment and several days later rode sixty-five miles on horseback to Dr. McDowell's home. Thus on Christmas Day, 1809, was performed the world's first ovariotomy which in the passing of years has been the means of saving and restoring to usefulness countless women's lives.

It must be remembered that the operation was performed without the oblivion of anesthesia and that this pioneer woman had only the solace of her prayers to lessen the searing pain of the knife.

Few women today would agree to undergo such an operation as did Jane Todd Crawford, but all now have the opportunity to aid in the saving and prolonging of future women's lives by contributing generously to the Jane Todd Crawford Memorial

Fund, thereby enabling students of gynecology to further their knowledge in this important field.

JESSIE LEE S. SCHERER (MRS. J. H.),
Chairman, Jane Todd Crawford Memorial Fund.

NOTE. It is suggested that this article be kept for future reference.

National Auxiliary Meeting.

Haddon Hall will be the headquarters for the Annual Meeting of the Woman's Auxiliary to the American Medical Association, which will be held in Atlantic City, New Jersey, June 9-13, 1947.

Requests for reservations should be sent immediately to Dr. Robert A. Bradley, Chairman, Subcommittee on Hotels, 16 Central Pier, Atlantic City, New Jersey.

The Auxiliary to the Mid-Tidewater Medical Society

Met in West Point on January 28th, with Mrs. Paul Pearson presiding.

Election of officers was held, the following being named: President, Mrs. M. H. Harris, West Point; vice-president, Mrs. E. L. W. Ferry, Millers Tavern; and secretary-treasurer, Mrs. W. H. Hosfield, West Point.

Mrs. J. E. Hamner, State President, gave the highlights on the Chicago Convention; Mrs. Fletcher Wright, Chairman of Leigh-Hodges-Wright Memorial, told about the splendid work her committee is doing; Dr. Matilda Chalkley, President of Richmond Auxiliary and Cancer Chairman of the State, gave an outline of her plans and of the work of her Auxiliary; Mrs. P. M. Chichester, Chairman of Organization, spoke briefly.

Four new members joined at this meeting, and renewed interest is anticipated.

ELIZABETH S. HARRIS (MRS. M. H.)
President.

Auxiliary to Richmond Academy of Medicine.

At the Meeting of the Auxiliary on January 17th, Judge James Hoge Ricks of the Juvenile and Domestic Relations Court, spoke on "Juvenile Delinquency". He was introduced by Mrs. George Vaughan, Program chairman. Mrs. Charles Edwards, Luncheon chairman, was assisted by Mrs. R. W. Vaughan and Mrs. C. E. Llewellyn.

MYRTLE G. MORTON (MRS. W. R.)
Publicity Chairman.

BOOK ANNOUNCEMENTS

Books received for review are promptly acknowledged in this column. In most cases reviews will be published shortly after the acknowledgment of receipt. However, we assume no obligation in return for the courtesy of those sending us same.

Health Insurance in the United States. By NATHAN SINAI, Dr. P. H.; ODIN W. ANDERSON; and MELVIN L. DOLLAR, School of Public Health, University of Michigan. New York, The Commonwealth Fund. 1946. xvi-115 pages. Cloth. Price $1.50.

Music in Medicine. By SIDNEY LICHT, M.D., Fellow, New York Academy of Medicine. New England Conservatory of Music, Boston, Massachusetts. 1946. xx-132 pages. Cloth. Price $3.00.

The Compleat Pediatrician. Practical, Diagnostic, Therapeutic, and Preventive Pediatrics. By WILBURT C. DAVISON, M.A., D.Sc., M.D., Professor of Pediatrics, Duke University School of Medicine, and Pediatrician, Duke Hospital; Formerly Acting Head of Department of Pediatrics, The Johns Hopkins University School of Medicine; etc. Fifth Edition. Duke University Press, Durham, North Carolina. 1946. vii-256 pages. Cloth. Price $3.75.

The Diagnosis and Treatment of Bronchial Asthma. By LESLIE N. GAY, Ph.B., M.D., Assistant Professor of Medicine of the Johns Hopkins University School of Medicine; Director of the Allergy Clinic of the Johns Hopkins Hospital. With a foreword by WARFIELD T. LONGCOPE, A.B., M.D., Professor of Medicine of the Johns Hopkins University School of Medicine; etc. Baltimore, The Williams and Wilkins Company. 1946. ix-334 pages. Illustrated. Cloth. Price $5.00.

To have a book on asthma open with the physiology and pathology of respiration is refreshing. There is need for re-emphasis on the physiological approach in this disorder. Asthma cannot be adequately viewed with the narrow immunological simplicity so fruitful in the problem of hay fever.

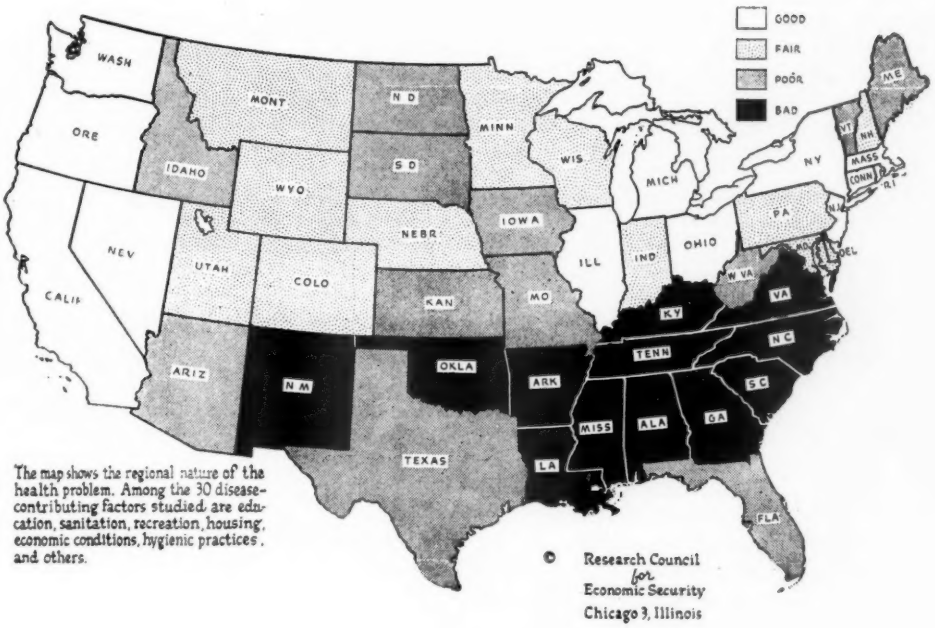
The chief value of this work lies in the case histories and handlings. There are discussions of helium therapy, exercise procedures in asthma, Bermuda as a haven for grass- and ragweed-sensitive persons, the radium treatment of lymphoid tissue residuals in the nasopharynx, treatment by bilateral resection of the pulmonary plexuses, as well as the more usual topics.

The book has defects in organization and omits some concepts essential for a beginner. It is not recommended for medical students or those without a background knowledge of allergy. The views of an outstanding clinical investigator will surely be worthwhile to those specially interested in the field.

M. E. B. OWENS, JR.

EDITORIAL

Our National Health Problem



The map shows the regional nature of the health problem. Among the 30 disease-contributing factors studied are education, sanitation, recreation, housing, economic conditions, hygienic practices, and others.

Prepaid Medical and Hospital Plans

PREPAID Medical Care and Blue Cross Hospitalization Plans are two factors that enter into the Research-Council-for-Economic-Security's picture of our National Health Problem. In 1943 three in every 1,000 Virginians were covered by prepaid medical care plans. Whereas, in Oregon 159 persons in every 1,000 were subscribers to such plans and in the state of Washington 146 persons in every 1,000 were covered. Alabama and Michigan each had 100 subscribers per 1,000 population and California 89, whereas Connecticut, Iowa, and Massachusetts had only two persons with such coverage in every 1,000 population. These figures are not as significant now as they will be in a future survey. At the present time they indicate, more than anything else, where the pioneering in this important health service took place. Virginia now has 115,000 enrolled or 4.1 per cent per 1,000 population, and ranks 8th among the states in percentage of enrollment.

The figures used by the Research Council for Economic Security for the Blue Cross Hospitalization Plans are the enrollments as of July 1, 1945, based upon population estimates of 1943. This gave Virginia a percentage of 7.2. The highest percentage of enrollment in Blue Cross plans was that of Rhode Island, 41, with Delaware a close second with 39.7. Eighteen of the 42 states for which figures are given have a lower percentage of enrollment than Virginia. Virginia now has a percentage of enrollment of 11 per cent and ranks 25th among the states.

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The enrollment in the Blue Cross Hospitalization Plans reflects the health consciousness of the population more accurately than does enrollment in prepaid medical care plans for the reason that there has been sufficient time for the Blue Cross Plans to have become standardized. Allowance still must be made for the percentage of rural population. It is physically more difficult to enroll the rural population than it is to enroll the employees of a great industrial plant, and one of the great problems of our National Health Problem is to devise ways and means of extending the benefits of these plans to our rural population.

Physicians in Civilian Practice During War Urged to Reply on New Questionnaire

PARALLEL with the advance of scientific warfare there has been a rapid advance in scientific medicine in the Twentieth Century. The huge strides made in our ability to destroy life and health in the recent war, however, have left many problems which remain to be solved. One of the most critical problems, as recognized by the House of Delegates of the American Medical Association in its December meeting, is that of providing care for the civilian population in the event of another national emergency.

The medical profession is wisely assuming its obligation to the American people to be prepared with facts and recommendations for any such future emergency. As a first step in this preparation, 5,000 questionnaires have gone out to a list of physicians, selected at random, who passed the recent war years in civilian practice.

On the basis of the answers to these questionnaires, sent out by the Committee on National Emergency Service of the A.M.A., it is hoped that facts may be determined as to how the civilian population was served in World War II. The questionnaires also provide an opportunity for those who were responsible for civilian care in those years, to indicate what changes should be made in the mobilization of medical service in future emergencies.

Five thousand questionnaires represents a very small percentage of the total number of physicians who remained in civilian practice. Dr. Edward L. Bortz, Philadelphia, chairman of the Committee on National Emergency Service, has appealed to every physician receiving the civilian questionnaire to respond promptly. The accuracy of the facts obtained and the soundness of the conclusions made by the study will be determined to a great degree by the cooperation which those receiving the questionnaire give the committee.

The committee received excellent cooperation from the 50,616 former medical officers who were mailed questionnaires last December on their experience in military service. These are now being analyzed and studied. The facts obtained will be used as a basis for recommendations to be made by the Committee in June to the House of Delegates.

With the cooperation of the 5,000 physicians who are now receiving questionnaires on their civilian experience, the committee will be able to complete the total study of how the medical profession can best serve our population, civilian and military, in the event of a future national emergency.

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Every physician receiving one of these questionnaires has a professional and humanitarian duty to perform in completing it and returning it promptly. It is preferred that each sign his name, but if anyone wishes to remain anonymous, he may do so. The important thing is to get as broad a representation of facts, experiences, and opinions as possible.

Misinformation About Crawford W. Long, the Discoverer of Anesthesia

RECENTLY your editor had an opportunity of visiting the Crawford W. Long region. With Hugh Young's article (*Bull. Hist. Med.* **12**:191, 1942) fresh in our mind, it seemed it would be an easy matter to see the building in which the first surgical anesthesia was used, the monument to Dr. Crawford W. Long in the village square, the house in which he was born, the shaft erected to Long in 1926 at his birthplace, the monument beside the court house near his birth place, the house in Athens in which he lived in his maturer years, his portrait in the alumni hall of the University of Georgia, where he received his A.M. degree when it was Franklin College, and finally his grave.

We approached Jefferson from Atlanta and were told by a filling station attendant that the site of Dr. Long's office was now occupied by a grocery store at the northeast corner of the square. The attendant stated further that the office had been torn down, which was just as well as *the operation* was performed out of doors in front of the office. The grocery store is a two story brick house painted green. Across the second story in faded pink letters on a dirty white background is the name of Crawford W. Long. Two tablets beside the front of the store make known the fact that on this site was performed the first operation under surgical anesthesia. One tablet is bronze and the other marble. Both tell the same story. In the village square are two shafts, one to the Confederate soldier and the other, the gift of Dr. L. G. Hardman and other doctors of Jackson County, is to the memory of Dr. Long.

At Athens, we began our search on the old campus of the University of Georgia. We asked a group of students, one girl and two boys, the way to the alumni hall. They knew of no such building, nor had they seen any portrait of Crawford W. Long. One of the boys went to the office and came back with the information that the portrait was in Memorial Building. The girl said she knew where Dr. Long had lived for she had lived in the same house when it was used as a sorority house. It was 165 Waddell Street.

A little further on a gentleman whom we took to be a professor pointed out to us the location on the campus of the monument to Long and confirmed the report that the portrait was in Memorial Building. He seemed quite interested in our curiosity in regard to Long, and volunteered the information that Long had received no formal medical education, having, as was common in those days, merely "read medicine" with a doctor already in practice. He was surprised when we told him that Long had attended Transylvania Medical School and had graduated in Medicine at the University of Pennsylvania. When we asked where Long lived, he said that Mrs. Fannie Long Taylor was living on Milledge Avenue, and that she could tell us where Dr. Long had lived and anything else we wanted to know. She had a trunkful of his papers which she was always glad to show to anyone who was interested. The professor then

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branched off on another old Athens doctor, a contemporary of Long's who was convinced that flies carried dysentery, but was unable to convince anyone else of that truth.

The Memorial Building was found without difficulty, but it contained no portraits of any kind. In fact it was bare of everything except three pool tables and the coach's offices. One of the coach's secretaries phoned all over the campus trying to locate the portrait. Several persons told her that it was in the Memorial Building, the others knew nothing of its whereabouts. We checked off the portrait from our list, and began looking for the house. No. 165 Waddell Street had "Crawford W. Long" in big letters across its front, but it did not look like the picture in Dr. Young's article, so we decided to look up Mrs. Fannie Long Taylor. The city directory contained no such name. Three Taylors lived on Milledge Avenue. We took the numbers down. At the first address, a handsome old lady told us that Mrs. Fannie Long Taylor lived about six blocks down the street in a duplex house near Henderson Street. The duplexity of the house was not apparent, so we inquired at the house on the corner. There we were told that Mrs. Taylor had been dead several years but that some of her people lived in the house, pointing out the house. To the question as to where Dr. Long lived, the lady of the corner house replied that he lived on Chase Street near the Chase school. A filling station attendant had told us that he lived on Chase near Prince Avenue. At the duplex house no one answered the bell, and as milk bottles were still on the porch we concluded that no one was at home.

We checked off the house and began to look for Oconee Cemetery. The Cemetery was found to be in dreadful repair, merely an old field crossed by footpaths. There were a few broken stones whose inscriptions could scarcely be read, and a broken down iron railing. There was no one to give us directions or to show us a plot, so we called it a day with the belief that in Athens Crawford W. Long was a fast fading myth.

As we got out of our car in Danielsville to look at the beautiful marble statue, a replica of the one in Statuary Hall of the U. S. Capitol by John Massey Rhind, we met a lady who told us without hesitation that Dr. Long was born in the house on top on the hill beyond the church. We drove the half mile over a red clay road. The house is now owned by Mr. Harrison Sorrow who has been living in it for six or seven years. When asked if Crawford W. Long had been born in the house, he replied that some folks said so and that others said that he was born in a house that is now occupied by Mr. Greene's store. Dr. Long's father built the house and young Long lived in it when he was a child, but whether he was born there he could not say. At the store a clerk and several customers were of the opinion that Long was born where the store now stands. When asked what made them think so, they all replied that Mr. Greene was of that opinion and that as Mr. Greene was 83 years old, he ought to know. We looked for the shaft that Hugh Young said had been erected in Danielsville in 1926, but could not find it. Danielsville is such a little place that we are sure we could have found it, had it been there, so we checked off that item. At Augusta we had no difficulty in finding the handsome building of the old medical college where in 1848 Long told for the first time the story of his discovery of ether anesthesia. The building no longer belongs to the medical school, but to the Garden Club, and its present owner is taking good care of this landmark. Thus, after three days of trying to find and photograph everything connected with Crawford W. Long and his epoch making operation, we wound up with an uncertainty as to just where he was born in Danielsville and as to where he lived in Athens, and concluded that the natives did not know whether he

operated indoors or out of doors or whether or not he had graduated in medicine, and cared little about where he was buried.

Floral Eonym (48)

JOHN STUART, THIRD EARL OF BUTE, 1713-1792

STEWARTIA (ALSO SPELLED STUARTIA)

THE third earl of Bute was the power behind the throne during most of the reign of George III, even when he had no official connection with the government. The Dictionary of National Biography described him as a proud but intentioned nobleman, with handsome person and pompous manners. He possessed some talent for intrigue, but his abilities were meagre and his disposition irresolute. He was utterly unfit to direct the destinies of a great nation. He had no knowledge of public affairs, no experience of parliamentary debate, no skill either in the management of men or in the administration of affairs. Nevertheless, he succeeded in breaking up the whig oligarchy. His talent lay in other fields. He had a taste for literature and the fine arts, was passionately fond of botany, and possessed a superficial knowledge of various kinds of learning. He was a governor of the Charterhouse and chancellor of Marischal College, Aberdeen; a trustee of the British Museum; president of the Society of Antiquaries of Scotland; a commissioner of Chelsea Hospital; and an honorary fellow of the Royal College of Physicians at Edinburgh. When he became prime minister, he purchased an estate at Luton Hoo where Robert Adam built him a palatial residence. Here he formed a magnificent library, a superb collection of astronomical, philosophical and mathematical instruments and a gallery of Dutch and Flemish paintings, as well as a botanical garden. Lansdowne House was built for him by the Adam brothers, but he sold it to Shelburne before its completion, for 22,000 pounds. Sir Joshua Reynolds painted his portrait in 1763 and in 1773, and there are engravings of Bute by Watson, Graham and Ryland after Ramsey.

Bute died at his house in South Audley Street, Grosvenor Square, on 10 March 1792 and was buried at Rothesay in the island of Bute.

Stewartia are showy, white flowered shrubs or trees of the family Theaceae found in the southeastern United States or eastern Asia. The common name for S. malachodendron is silky camellia, and the S. pentagna is mountain camellia.

SOCIETIES

The Arlington County Medical Society

Held its first meeting for 1947 on January 16th under the direction of the newly elected President, Dr. C. P. Cake.

The scientific program was given by Dr. John L. Parks, Professor of Obstetrics at George Washington University School of Medicine, on the subject, "The Pathological Condition of Pregnancy".

LEO SOLET, *Secretary.*

The Augusta County Medical Association

Held its regular quarterly meeting at Hotel Stonewall Jackson in Staunton on the afternoon of February 5, with a good attendance of members and guests. Dr. G. Edmund Stone of Staunton presided and Dr. Boyd H. Payne, also of Staunton, was at the secretary's desk. Dr. Richard P. Bell, Jr., Staunton, reported a case of Dermoid Cyst of the Right Ovary, Gangrenous, on Twisted Pedicle, in a Child

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of Four Years, after which the following papers were read:

Some Studies of Hypertension—Dr. H. Fitzhugh White, Staunton;

The Treatment of Nervousness, Including Psychosomatic Conditions—Dr. F. W. Dershimer, Wilmington, Delaware;

The Value of Shock Therapy in Neuropsychiatric Disorders—Dr. R. Finley Gayle, Jr., Richmond.

Following the scientific session there was a short business meeting, at which Dr. John T. Obenschain of Waynesboro was elected to membership, after which the meeting adjourned for dinner at the Hotel.

Lynchburg Academy of Medicine.

At its regular meeting on February 3rd, Dr. Conrad G. Collins, chief gynecologist at Tulane University and consultant in the Ochsner Clinic, spoke on "Intravenous Clotting as a Problem in Obstetrics and Gynecology". There was an attendance of fifty-five, including doctors from Bedford, Amherst, South Boston, Roanoke and Richmond.

Dr. F. Read Hopkins is president of the Academy and Dr. Robert H. Cox, Jr., secretary.

The Medical Society of Northern Virginia

Held its regular meeting in Woodstock on December 10th, under the presidency of Dr. G. G. Crawford, Strasburg. The following program was presented: Malignant Tumor of Kidney by Dr. E. C. Stuart, Jr., Winchester; Potts Disease with Pregnancy by Dr. P. T. Grove, Winchester; Idiopathic Thrombocytopenic Purpura by Dr. Elizabeth B. Sherman, Front Royal; A Case Report by Dr. L. K. Woodward, Woodstock; Coronary Thrombosis by Dr. F. D. Whitworth, Front Royal; Hepatitis by Dr. W. W. Zimmerman, Purcellville; and The Importance of Frequent Examination of the Chest by Dr. Charles Bondurant, Front Royal. Dr. W. Warren Sager, Washington, D. C., was invited guest and his subject was The Diagnosis and Treatment of Intestinal Obstruction.

New officers elected at this meeting are: President, Dr. D. M. Kipps, Front Royal; vice-president, Dr. C. H. Iden, Berryville; and secretary-treasurer, Dr. Herman I. Pifer (re-elected), Winchester.

Roanoke Academy of Medicine.

The February meeting of the Academy was a dinner meeting at Hotel Roanoke on February the 3rd. Following the dinner, two guest speakers presented the scientific program: Dr. Harry Walker, Richmond, spoke on The Management of Tetanus, and Dr. Harry J. Warthen, also of Richmond on Conservative Surgery in Diabetes. Dr. Charles A. Young and Dr. Wade H. Saunders, both of Roanoke, are president and secretary, respectively.

The Williamsburg-James City County Medical Society

Held their quarterly meeting on February 14th. Dr. H. E. Davis was the retiring President, and Dr. J. R. Parker of Providence Forge was elected to serve for the coming year. Dr. F. A. Dick, Williamsburg, was elected Vice-President, and Dr. E. Beamer-Maxwell, also of Williamsburg, was re-elected Secretary-Treasurer. Drs. H. E. Troup and Allan Burke, both of Williamsburg, were elected to membership.

The Society hopes to increase its membership and the cooperating group by inviting guests from the near-by County Societies, and from other civic organizations. The next meeting will be held on May 9th.

The Wise County Medical Society

Was entertained by Dr. N. H. Short, of Norton Clinic, at Hotel Norton, February 14th, with an attendance of twenty-five. After a feast on turkey and all that goes with it, Dr. Lloyd G. Thompson, Richlands, spoke on Liver Diseases, centering his attention on Cirrhosis, and Dr. James P. Williams, Richlands, spoke on his actual experiences with Vagotomies for Gastric Ulcer. Both of these presentations were outstanding and were followed by fifteen-minute question periods.

Officers elected for 1947 are: President, Dr. N. H. Short, Norton; vice-presidents, Drs. J. A. Gilmer, Big Stone Gap, G. C. Snead, Derby, and H. H. Howze, Norton; and Dr. Frank Handy of Appalachia was elected to the Board of Censors. Dr. T. J. Tudor of Norton was re-elected secretary-treasurer. The President appointed the following committee chairmen: Program, Dr. C. B. Bowyer, Stonega; Financial, Dr. C. L. Harshbarger, Norton; and Social, Dr. C. R. Jones, Dorchester.

Virginia Peninsula Academy of Medicine Holds Special Meeting.

Dr. Harry Bakwin of New York City addressed the Virginia Peninsula Academy of Medicine at its regular monthly meeting, February 17, on "Why

Children Misbehave". Dr. Bakwin is Associate Professor of Pediatrics, New York University, Associate Pediatrician, Bellevue Hospital, and an outstanding authority on child psychology.

Preceding the address, ninety persons attended a dinner given by the Academy of Medicine at the Chamberlin Hotel, Old Point Comfort, in honor of Dr. Bakwin. The wives of the Academy members attended the dinner as guests.

Dr. Bakwin delivered his address at an open meeting in the Newport News High School Auditorium. This meeting was jointly sponsored by the Peninsula Academy of Medicine and the Parent-Teacher Associations Federation of the Lower Peninsula and was attended by a crowd estimated to number nearly 800. The speaker was introduced by Dr. Paul Hogg, of Newport News, on whose invitation he came to the Peninsula. Dr. Robert H. Wright, Jr., of Phoebus, president of the Virginia Peninsula Academy of Medicine, presided at the meeting.

CHESTER D. BRADLEY,
Secretary.

NEWS

The Southwestern Virginia Medical Society

Will meet on May 1st at Marion. The night program, which begins with a banquet, will be highlighted by the presence of Dr. J. S. Speed of the Campbell Clinic, Memphis, Tennessee, who will speak on "An Analysis of the Etiology of Low Back Disability: Treatment". Also appearing on this program will be Dr. W. R. Bond, Richmond, who will present some of the latest developments in the clinical use of Testosterone, and Dr. M. A. Johnson, Roanoke, who will speak on hip fractures. Among those on the afternoon program will be Dr. Joseph Barrett, Richmond, who will speak on "The Care of the Mentally Ill in Virginia: Past, Present and Future".

The officers of the Southwestern Society extend an invitation to all members of the Medical Society of Virginia to attend this meeting, especially orthopedic men throughout the State. Dr. C. F. Graham, Wytheville, is president.

A. F. GIESEN, *Secretary-Treasurer.*

New Health Services.

Effective February 1, 1947, Charles City County and New Kent County were added to the Peninsula Health District, with offices in Charles City and Providence Forge, respectively. Dr. T. F. McGough is Health Officer for this District, with headquarters in Hilton Village, Virginia.

Effective February 1, 1947, the Amelia-Goochland-Powhatan Health District was established, with headquarters at Powhatan, Virginia. Dr. Henry M. Snead is Health Officer of this District.

To Assist in Venereal Disease Work.

The State Department of Health announces the appointment of Dr. William J. Frohbose as clinical consultant and assistant in the Division of Venereal Diseases of which Dr. Edward M. Holmes is director. Dr. Frohbose is a member of the class of '43, Medical College of Virginia, and served two years in the Navy.

South Atlantic Association of Obstetricians and Gynecologists.

The annual meeting of the Association was held in Savannah the first part of February, with Dr. Robert A. Ross of Durham, N. C., presiding. At the close of the meeting, Dr. J. Randolph Perdue of Miami succeeded to the presidency. Dr. Tiffany J. Williams, Charlottesville, who has served as secretary-treasurer for several years, was named president-elect, and Dr. E. D. Colvin, Atlanta, Ga., succeeded him as secretary-treasurer. Dr. J. Ernest Ayre and Dr. Archibald D. Campbell, both of Montreal, were elected to honorary membership in the Association. The next meeting will be at Augusta, Ga., in February 1948.

Dr. Charles A. Young, Jr.,

Roanoke, is now serving a residency in ophthalmology at the Institute of Ophthalmology, Presbyterian Hospital, New York. He will be there for three years. Dr. Young graduated from the University of Virginia in 1942 and has just received his discharge from the U. S. Army.

Married.

Lt. (jg) Thomas Hancock Garth, MC., USNR., and Miss Anne Addison Waddell, both of Charlottesville, February 5th. He received his medical degree from the University of Virginia in 1946 and is at present stationed at the U. S. Naval Hospital in Portsmouth.

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Dr. Rudd to Retire.

Dr. Wortley F. Rudd, dean of pharmacy of the Medical College of Virginia, will retire on July 1st, after having held this position since 1920. He will be succeeded by Dr. Robert Blackwell Smith, Jr., who has been assistant dean since December 1945.

Dr. Austin I. Dodson,

Richmond, was one of the guest speakers at the International Post-Graduate Medical Assembly of Southwest Texas held the latter part of January at San Antonio. His talk before the General Assembly was on The Management of Urolithiasis. Sectional meetings were held at lunch on January 29 and 31, at which time he discussed Treatment of Hydronephrosis and Treatment of Congenital Defects of the Male Genitalia.

American Congress on Obstetrics and Gynecology.

The program of the Third Congress to be held September 8-12, 1947, in St. Louis, will feature general sessions for all groups making up the Congress as well as smaller individual group meetings and round table discussions. The morning sessions will be panel-type presentations of Anesthesia and Analgesia, Cancer, and Caesarean Section. The afternoon meetings of the medical section of the Congress will consider Psychosomatic Aspects of Pregnancy, Pregnancy Complicating Cardiac Disease, Diabetes and Tuberculosis, and Recent Advances in Endocrinology. Round Table discussions will consider such topics as etiology of abortion, asphyxia, fibroids, prolonged labor, infertility, early ambulation, adolescence, treatment of abortion, genital relaxation, ovulation, the menopause, the cystic ovary, uterine bleeding, nutrition in pregnancy, geriatric gynecology, endometriosis and erythroblastosis.

The popular forceps and breech demonstrations that attracted so much attention at the Second Congress in 1942 will be increased in number so that eighteen demonstrations per day will be held.

A large Scientific and Educational Exhibit is being set up under the direction of Dr. J. P. Pratt of Detroit and a comprehensive Motion Picture Program is being arranged by Dr. John Parks of Washington, D. C. The committees assisting these doctors will review applications by prospective participants late this spring. Anyone wishing to make application for space in the Scientific Exhibit or for time on the Motion Picture Program may obtain the proper blanks from the office of the Congress at 24 West Ohio Street, Chicago 10, Illinois.

Duke University School of Medicine News.

Dr. Hans Löwenbach, Associate Professor of Neuropsychiatry, has just returned from a six months' assignment in occupied Germany. During this time Dr. Löwenbach visited, under the sponsorship of F.I.A.T. (Field Intelligence Agency Technical) most of the medical schools in the American, British, and French zones of occupation and in Berlin. Dr. Löwenbach's assignment was to gather such manuscripts on medical and related research that had remained unpublished due to the war and after-war conditions. More than 25,000 pages of original manuscripts in all fields of medicine were gathered and microfilmed. At the present time, this material is on its way to this country to be catalogued and abstracted. The material is available to the public through the Publications Board, Department of Commerce, 16th and K, Washington 25, D. C.

Dr. Hsiao-Chien Chang, Dean of Hsiang Ya (Yale-in-China) Medical College, Changsha, Hunan, China, and Dr. Pao-Chang Hou, Professor of Pathology at Cheeloo University, Tsinan, China, were recent visitors here. As guests of the Department of State, U. S. A., these doctors will continue to visit American medical institutions until June, 1947, at which time they will return to China to resume work in their respective universities. Dr. Chang addressed the undergraduate medical society on "Medical Education in China" and Dr. Hou's lectures to the Duke Faculty and student body on "Leprosy and Plague" and on "Kala-Azar" not only contributed to the general understanding of these diseases but also to an appreciation of medical problems in his native country.

The Technical Division of the Department of Radiology, under the supervision of J. B. Cahoon, Jr., R.T., has increased lectures and demonstrations in order to offer post-graduate instruction to outside technicians who need refresher courses. Two students are admitted for the accredited course in x-ray technical training each March and October. A nursing degree, college diploma, or former technical training is a pre-requisite.

Miss Helen Kaiser, Director of Physical Therapy, has recently returned from Greece where she was

active in the Near East Foundation. This organization, which has been engaged in Middle East relief since World War I, has established two demonstration rehabilitation centers with the cooperation of U.N.R.R.A. and the Greek government. These centers are for the care of the maimed of World War II as well as the civilian crippled and disabled. The Foundation has established a Physical Therapy School which has been set up by experienced American personnel, due to the lack of trained Greek personnel. Adequate supervision will be given to the students during their training and first years of work experience. The course has been set up to meet the requirements of the American Medical Association and upon completion of their present course of 12 months, two students will be selected for further study in physical therapy at Duke University.

Dr. Duncan & Dr. Hollins.

Dr. George A. Duncan announces the association of Dr. George G. Hollins, Jr., in the practice of orthopedic surgery. Their office is in Wainwright Building, Norfolk.

Dr. Joseph M. Barker

Has recently returned from the University Hospital, Ann Arbor, Michigan, where he spent one year as Clinical Fellow of the American College of Physicians under the direction of Dr. Frank N. Wilson in Electrocardiography. He is now located at 1801 K Street, Northwest, Washington, D. C.

Virginia Society of Ophthalmology and Otolaryngology.

The annual meeting of this Society will be held at The Cavalier, Virginia Beach, May 10th, under the presidency of Dr. Thomas E. Hughes, Richmond. Dr. Fred E. Hamlin, Roanoke, is president-elect, and Dr. Francis H. McGovern, Danville, secretary-treasurer. Dr. A. A. Burke, Norfolk, is chairman of arrangements for the meeting.

Dr. S. B. Mizroch

Announces the opening of his office in Wainwright Building, Norfolk with practice limited to the diagnosis and treatment of cancer and related diseases. He is a graduate in medicine from the University of Virginia, class of 1936, and has recently returned from Service in the U. S. Army.

Wanted—

A young doctor for a junior partner. Country practice; good salary plus commission. Address "Doctor", care this journal, 1200 East Clay Street, Richmond 19. (*Adv.*)

For Sale.

GE X-Ray, Model 1775, 30 ma, 85 KVP, table with Bucky, in excellent working condition. James P. King, M.D., Radford, Virginia. (*Adv.*)

For Sale—

Burdick Quartz Ultraviolet Lamp. In perfect condition. All the most desirable features. Write "Burdick Lamp", care this journal, 1200 East Clay Street, Richmond 19. (*Adv.*)

Doctor Wanted—

In town with thriving paper mill, employing over three hundred people, with five hundred people in town and good surrounding farming section. For details, write Mr. S. T. Putt, Big Island, Va. (*Adv.*)

Doctors Needed in Rural Areas.

Many inquiries come to this office for doctors in rural communities. If interested in such, send your name to this journal, 1200 East Clay Street, Richmond 19. (*Adv.*)

The School-Child's Breakfast.

Many a child is scolded for dullness when he should be treated for undernourishment. In hundreds of homes a "continental" breakfast of a roll and coffee is the rule. If, day after day, a child breaks the night's fast of twelve hours on this scant fare, small wonder that he is listless, nervous, or stupid at school. A happy solution to the problem is Pablum. Pablum furnishes protective factors especially needed by the school-child—especially calcium, iron and the vitamin B complex. The ease with which Pablum (or Pabena) can be prepared enlists the mother's cooperation in serving a nutritious breakfast. This palatable cereal requires no further cooking and can be prepared simply by adding milk or water of any desired temperature.

OBITUARIES

Dr. James Alexander Grizzard,

Drewryville, widely known Southampton County physician and businessman, died January the 28th. He was sixty-five years of age and a graduate in medicine from the Baltimore Medical College in 1906, joining the Medical Society of Virginia the same year. He was a member of various medical

societies and a former president of the Southside Virginia Medical Association, a member of the local Ruritan Club, and a thirty-second degree Mason. He is survived by his wife and three children.

Dr. William Seddon Cox,

Of West Point, widely known physician of Tidewater Virginia, died in a Richmond hospital on February the 11th, after a long illness. He was sixty-one years of age and a graduate from the former University College of Medicine, Richmond, in the class of 1913. He practiced for a number of years in King and Queen County before moving to West Point about twelve years ago. He was a former member of the Town Council of West Point and was active in the civic and religious life of the community. He was a member of his State and local medical societies. His wife and three children survive him.

Dr. Robert Lawrence Mason,

Roanoke, died January the 15th, aged sixty-one years. He graduated from the Medical College of Virginia in 1915 and had been a member of the Medical Society of Virginia for sometime. His wife and three daughters survive him.

At a meeting of the Executive Committee of the Roanoke Academy of Medicine on January 21, 1947, the following resolutions were adopted:

The Roanoke Academy of Medicine wishes to express to the family of Dr. R. L. Mason their sincere sorrow in his death. Since locating here he has been a member of the Roanoke Academy of Medicine and recognized by that body as a man of highest ideals both in his professional and civic life. He loved clean sports of every kind and was interested in many of their activities. The Boy Scouts of Roanoke knew him well and will miss him.

BE IT RESOLVED that a copy of this expression of regret be entered upon the minutes of the Roanoke Academy of Medicine and that copies be sent to the family and to the Medical Society of Virginia.

L. G. RICHARDS
T. ALLEN KIRK
K. D. GRAVES, *Chairman*

Dr. Reginald Munson,

For many years a practicing physician at Linden, died December 29. He was eighty-nine years of age and graduated in medicine from George Washington University, Washington, in 1883. He was a member of the Medical Society of Virginia.

Resolutions on Doctor Carper.

WHEREAS, Dr. O. W. Carper was an active member of the Northern Virginia Medical Society for fourteen years and a past president; and,

WHEREAS, his service to the Society, to his profession and to his community was both valuable and outstanding; and,

WHEREAS, we, his professional colleagues and friends, feel that it is fitting that the records of the Society should contain some evidence of recognition of, and appreciation for, his loyal and able service to the Society.

NOW THEREFORE, BE IT RESOLVED: *First:* That the Northern Virginia Medical Society has lost one of its most genial and valuable members and the medical profession of the State one of its outstanding men.

Second: That the Society, as a whole, and its members, as individuals are deeply sensible of the loss that has been sustained by the untimely death of Dr. Carper while he was at the height of his career, death having come from a cause, before which our profession at the present time stands helpless.

Third: That the Society, as an official organization, and its members as individuals, recall with pleasure the association with him, and they express their gratitude for his contribution to their profession and will remember him for his charming personality and delightful sense of humor, and that their regret at his departure is indeed great.

Fourth: That the Society express to Mrs. Carper and her daughter their sincere sympathy in this time of sorrow.

Fifth: That these resolutions be spread on the minutes of the Society and the Secretary directed to send a copy thereof to Mrs. Carper.

D. M. KIPPS
ELIZABETH B. SHERMAN
L. J. HANSBROUGH
Committee.

Resolutions on Dr. J. W. Preston.

At a meeting of the executive council of the Southwestern Virginia Medical Society held January 16, 1947, at Wytheville, Virginia, the following resolution was adopted:

BE IT RESOLVED that in the death of Dr. J. W. Preston this Society has lost a most skillful and competent doctor and a real friend who administered to the public at all hours and gave his time to the great cause and to the betterment of the medical profession in the State and in America.

IT IS FURTHER RESOLVED that a copy of this be sent to the VIRGINIA MEDICAL MONTHLY and to his family as well as spread on the minutes of this Society.

R. M. DEHART, *Chairman*
C. F. GRAHAM, *President*
A. P. JONES
BEVERLEY ECKLES
W. A. PORTER
T. L. GEMMILL